

BLOOD TRANSFUSION HEMATOLOGY HOSPITAL



SYMPTOMS OF
DAMAGED PERIPHERAL
NERVOUS SYSTEM IN
MULTIPLE MYELOMA

MANAGEMENT MODULE
PROGRAM OF SPONSORED
MEDICALTIONS (GLIVEC,
TASIGNA): AN EFFECTIVE
WAY TO MANAGE AND CON-
TROL THE MEDICATIONS IN
PROGRAM.

THE ANNUAL
HEMOPHILIA
CONFERENCE 2018

2
2018

INTRODUCTION

Blood Transfusion - Hematology Newsletter was first published in December 2017. After the very first publication, the Editorial Board has received contributions from colleagues on the content layout as well as the design form to help the BTH Newsletter is getting better for the published times later.

BTH Newsletter No. 2/2018 was published to celebrate the great events of early 2018 such as: Commemoration Day of the Communist Party of Vietnam, the anniversary of the Vietnamese Teacher Day and International Women's Day 8/3, The date of the establishment of the Ho Chi Minh Communist Youth Union, etc. At the same time, the program of seminars organized by the Blood Transfusion and Hematology Hospital. We would like to bring useful information to the readers by this publication of BTH Newsletter.

Finally, we are pleased to receive the welcome as well as the contribution of colleagues, along with the help to enrich the content and form of the article for creating a unique look of the content. Blood transfusion – Hematology Hospital.



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NEWS

BLOOD TRANSFUSION
HEMATOLOGY HOSPITAL

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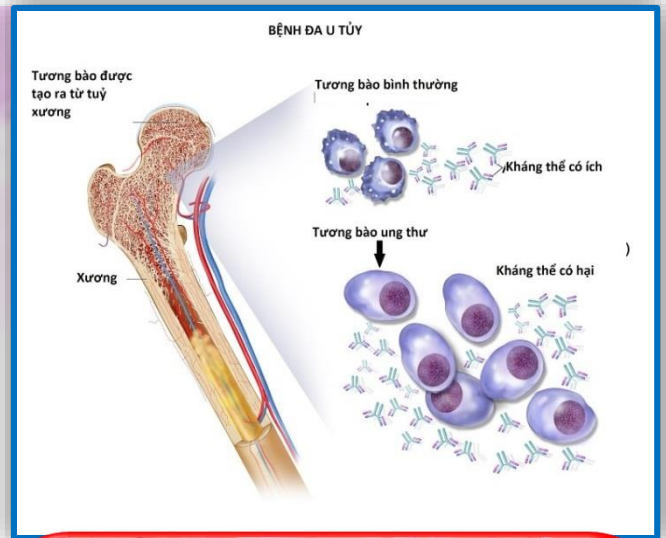
NGUYEN THI PHI YEN.

IMPROVING THE LIFE QUALITY FOR PATIENTS WITH MULTIPLE MYELOMA

Multiple myeloma (Kahler) is known as a malignantly proliferative disease of plasmocytosis occurred in bone marrow and some other organs. It causes an increase in blood immunoglobulins, forming multiple clots of oncosis, which leads to broken bones and the dysfunction of many organs, including: kidney failure, anemia, hypercalcaemia blood,... At the Blood Transfusion - Hematology hospital, the update of latest knowledge in diagnosis, treatment and caring for patients with multiple myeloma has become an annual activity.

On April 7th 2018, the conference "New approach to treatment of re-occurring, resistant multiple myeloma" was organized at Le Meridien Saigon hotel by the collaboration between medical specialists and Doctors from Raffle Singapore Hospital and Blood Transfusion - Hematology Hospital. This was an opportunity for Doctors in the field of Hematology to update new knowledge in treatment of Kahler disease from other developed countries in the region as well as all over the world.

On the afternoon of the same day, the program of Communicating Health Education for multiple myeloma patients was also held at Blood Transfusion - Hematology hospital with the topic of "Improving life quality for patients". This program has been organized annually which aims to update the situation, achievements as well as effective methodologies for treatment of patients with multiple myeloma. In addition, recommendations regarding the monitor and caring of bone issues were also discussed by the Doctors in the program. Doctor. Specialist II. Ngo Ngoc Ngan Linh - Head of Hematology- Adult 2 Department said " There are four important factors to ensure good life quality for patients, which are: correct treatment; meeting optimal response; controlling disease symptoms; monitoring drug's adverse effects. Besides,



maintaining optimistic spirit and healthy lifestyle also help for better treatment performance

At the Blood Transfusion - Hematology hospital, which is the leading hospital in the field of hematology in southern region as well as in the whole country, the updating of treatment knowledge for specific hematological diseases is essentially important, which indeed shows the attention and desire to bring effective treatment and better life quality for patients.



The National Assembly Delegation visited and wished Happy New Year to the Blood Transfusion – Hematology hospital

On the 6th Feb afternoon, the municipal party committee member - Deputy director of HCMC National Assembly Delegation Phan Nguyen Nhu Khue visited and wished Happy New Year to the Blood transfusion - Hematology hospital.

Comrade Phan Nguyen Nhu Khue congratulated the achievements obtained by the hospital in 2017, especially the success in the field of Stem cell transplantation and Blood bank. In addition, the National Assembly Delegation also gave recommendation on the high working spirit and determination of the governing body and employees of the hospital in examining and caring for patients.

Comrade Phan Nguyen Nhu Khue encouraged all the medical employees and doctors of the hospital to continue developing further the obtained achievements, contributing significantly to the city Healthcare as well as improving the training and education of the medical employees and doctors to satisfy the requirements of delivering medical care for people.



The municipal party committee member – Deputy director of HCMC National Assembly Delegation Phan Nguyen Nhu Khue gave present to the Blood Transfusion – Hematology Hospital



THE ANNUAL HEMOPHILIA CONFERENCE 2018

On the morning of March 17th 2018, the annual Hemophilia conference 2018 was held at Lotte Legen Saigon Hotel with the goal of updating the latest professional knowledge and sharing experience in treating Hemophilia diseases for medical employees who is working in hospitals of southern region.



The conference was organized formally with the presence of Dr. specialist II. Phu Chi Dung - the Director of Blood Transfusion - Hematology hospital, Deputy director responsible for southern region of the Vietnam blood coagulation disorder association; Dr. Joyce Lam - Senior advisor, KK Singapore Obstetrics and children's Hospital; Assoc Prof. Dr Huynh Nghia - Vice Dean of the Faculty of Medicine, HCMC University of Medicine and Pharmacy, Head of the faculty of children Hematology, Blood Transfusion - Hematology hospital; Dr. specialist II. Nguyen Thi Hong Hoa - Head of faculty of Medical check, Blood Transfusion - Hematology hospital, director of southern branch of Vietnam blood coagulation disorder and over 200 delegators from general/special hospitals in the area.

Hemophilia is the disease caused by the lack of coagulating factor VIII (Hemophilia A) or IX (Hemophilia B), which makes patients easy to bleed at joint muscle, prolonged bleeding after surgical operation, teeth extraction, etc.. Complications of musculoskeletal disease are common in countries where preventive treatment program is not readily available and as consequence, patients can become disabled.

The treatment includes supply of lacking coagulation factors to stop bleeding, treating of musculoskeletal disease, rehabilitation of joint function, etc..For patients who have severe complications, it is necessary to proceed surgical operation for rehabilitation of motor function.

At the conference, Dr. Specialist II. Phu Chi Dung has delivered the inaugurating speech and shared the methodologies of treating Hemophilia in hospitals. Throughout the conference, the main focuses were sharing the techniques and experiences between experts from Singapore hospital and the Blood Transfusion - Hematology hospital as well as answering the questions of delegators participated.

The annual Hemophilia Conference 2018 was concluded in the joy and belief for a developing future of blood transfusion and hematology in the whole country as well as in the Blood Transfusion - Hematology hospital.



The presenters took a photo together at the Conference

THE SEMINAR ON CELLULAR THERAPY

On Feb 13th 2018 afternoon, at the meeting hall on 4th floor, the Blood transfusion - hematology hospital has successfully organized the seminar on "cellular therapy", which was hosted formally with the presence of Prof. Akihiro Shimosaka - President of ACTO association; Dr. Specialist II. Phu Chi Dung - Director of Blood Transfusion - Hematology hospital and over 60 delegators from other hospitals in HCMC.



THE WORLD FEDERATION OF HEMOPHILIA'S EXPERTS VISITED AND WORKED IN HCMC

As part of the collaborative framework between the Vietnam Blood Coagulation Disorder Association and the World Federation of Hemophilia (WFH), the experts of WFH have visited and worked in HCMC for two days from March 22nd to 23rd 2018. With the professional organization and rigid collaboration between Blood Transfusion – Hematology hospital and the Southern Branch of Vietnam Blood Coagulation Disorder Association (SBVBCDA) together with Children's hospital I and Gia Dinh People's hospital, seven experts of WFH have had 2 effectively working days. According to the comment of doctors and the executive board of SBVBCDA, the opportunities for international collaboration like this would contribute significantly to improve the knowledge for healthcare employees as well as improve the life quality for Hemophilia patients.



The medical experts visited patients

Technical training for volunteers of SBVBCDA



Genetic specialists worked with the doctors



Specialists in nursing trained the hospital's nurses on caring techniques for Hemophilia



HOẠT ĐỘNG ĐOÀN THỂ

BLOOD TRANSFUSION – HEMATOLOGY HOSPITAL'S LABOR UNION PARTICIPATED IN THE CONVENTIONAL BOAT RACING COMPETITION FOR CELEBRATING

In order to encourage sport and physical activities and make opportunities for labors and workers in healthcare to participate and exchange experiences in maintaining healthy lifestyle after work as well as to celebrate the successful Health Labor Union Congress XII period 2018-2023 and the upcoming city Labor Union Congress XI and Vietnam Labor Union Congress XII and 63-year Vietnam Doctor's Day anniversary (27/02/1955 – 27/02/2018), the Health Labor Union has celebrated the competition “Conventional Boat racing” with the participation of over 100 teams from hospitals and units belonged to the health department.

In this competition, the labor union of Blood Transfusion – Hematology hospital has incredibly took 2nd position in the first round to get to the second round. However, as to face with strong opponents, the labor union of Blood Transfusion – Hematology hospital had to leave before reaching the final round.

Nevertheless, after this competition, the hospital labor union has had opportunities to practice together to promote the solidarity between labors and obtain boat racing experience from other teams. Hopefully, in the coming seasons, the labor union of Blood Transfusion – Hematology hospital will achieve higher results.



COPORATE ACTIVITY

BE PROUD OF VIETNAMESE WOMEN

Be proud of Vietnamese women

Concerning on national works, be good in house chores

Deserve with eight golden words

Uncle Ho commended with great glory

“indomitable, heroic” as always

“capable, loyal” which were what Uncle said

It is enormously proud that

Vietnam has a lot of heroes

Who are women loyal to the country

Keep going forward to the front line

And sacrifice for mother land

Each of them is a beautiful flower for life ! (collection)

President Ho Chi Minh stated that “our country - Vietnam is “sewn” by the women, including the young and old, to be more beautiful and bright”. ...When the country needs, everyone give hands and efforts to build up and protect. Among them, women play an important part in the prosperity of the country. Vietnamese women were honored to be given eight golden words by Uncle Ho “Heroic, indomitable, loyal, capable”. This is the recognition for their great contribution to the country. A lot of women names have been carved into history for their sacrifice to protect the country, such as: Cao Thi Nam, Dang Thi Ranh, Ho Thi Huong, Huynh Thi Chau, Mac Thi Bui, Vo Thi Sau, Ho Thi Luom... who were female heroes during the wars against France and USA. And plenty of other heroes in the renovating period, such as: Nguyen Thi Hai, Hoang Thi Thanh Mai, Pham Thi Viet Nga, Tran Thi Duong, Vu Thi Chat.....

For the above facts, Mrs Truong My Hoa – retired Vice President stated: Woman is the soul of family, who takes care of the house chores as well as both husband, children and even parents. To fulfill this responsibility, they have to sacrifice a lot as doing two jobs simultaneously, which are worker in the family and as the same time, labor in the community: “Uncle Ho said that woman is a half of Revolution, who has to take care of both family’s and nation’s work. It, indeed, creates

THE WRITING TO TAKE PART IN IN THE COMPETITION “ INTERACTIVE AND CREATIVE WOMEN IN HEALTH”

*Got 1st prize at Blood transfusion –
hematology hospital.*

Composed: Dr. Nguyen Anh Tuan

Faculty: Diagnostic imaging

parents have responsibility in the family, woman is closer to the children as they are always side by side from the time being pregnant, giving birth and feeding the newborn. Therefore, woman usually has to sacrifice their own hobbies and sometimes, even their lives to look after their family”.

It can be say that the title “good in doing nation’s work, good in doing house chores” is the pride and motivation of every female worker, officer and labors in all fields to try their best to work and build up their happy family.

The campaign “good in doing nation’s work, good in doing house chores” is inherited from the campaign of “Three capabilities” which has been initiated by Vietnam General Confederation of Labor since 1989

For the period of 29-year, the spirit of this campaign has been claimed and developed by the determination of all women, which has become the goal for every female worker, officer and labor with the hope of bring their skills and abilities to contribute for the development of community and family as well as to promote the development of women, gender equality and the overall advancement of Health. The precious characteristics of woman in general have been inherited and developed by the health employees, who have become blooming flowers with pleasant smell and shining in the campaign “two good jobs”

In participating to the writing competition "interactive and creative health woman" 2018 which was hosted by the Health Labor Union, I – who is currently a doctor in Diagnostic imaging Faculty – formally introduce a representative person in Blood Transfusion – Hematology hospital (BTHH): Dr. Specialist II. Truong Thi Kim Dung – party committee deputy secretary – Deputy director of the hospital.

The first impression when meeting with Dr. Specialist II. Kim Dung is that she is very gentle, open-hearted and considerate with patients as well as colleagues. Since 1989, Dr. Specialist II. Kim Dung has worked in HCMC Blood Transfusion - Hematology hospital. During the period of 29-year working, there were a lot of difficulties and challenges, however, with the steady determination and hard working, Dr. Specialist



Dr. specialist II. Truong Thi Kim Dung – deputy director of Blood Transfusion – Hematology hospital

II Kim Dung have earned the trust of colleagues and governing body of the hospital to be promoted in the following positions: commissioner of hospital party committee, deputy secretary of party committee, party committee secretary term X to XIV, deputy director concurrently with head of immune faculty, executive deputy director and at present, deputy secretary of party committee - deputy director of hospital responsible for the blood bank term 2015-2020... Working as a manager is unfamiliar, hence Dr. specialist II. Kim Dung is always aware of her responsibility as well as giving advices to the party committee - hospital governing body to improve the quality of blood storage and preservation and to apply modern technologies into the work of blood storage and preservation

As a highlight in 2016, Dr. Kim Dung received the 14th Kova Awards in the category of

"creation" with the research project "Evaluating the effectiveness of using frozen red blood cell products in HCMC", this research has increased the storage of red blood cell for up to 10 years compared to normal methods, which can only store for a maximum of 42 days.

Dr. Kim Dung said that the research of frozen red blood cells would assist clinical doctors to have more adaptable treatments for patients and the community of patients with negative Rh blood, which is the rare blood type in Vietnam, ranging only from 0.04% to 0.07%. In addition, patients with the above rare blood type or people who do not want to be transfused blood from others might store their own blood in the HCMC blood bank to use in future, for example: when they have set up plan for surgical operation.

Indeed, this research has brought outstanding benefits and HCMC Blood transfusion - hematology hospital has become the first unit to offer and use of frozen red blood cells, which helped to save a lot of patients with rare blood types. Up to now, the hospital has provided 450 bags of blood to more than 22 hospitals to resolve cases of patients with negative Rh in emergency.

In daily life and work, Dr. Kim Dung usually self-improve her personality, morality and practice "do what you say", starting from the smallest things, such as compliance of hospital's rules and regulations, using reasonably and saving resources, be simple, humble, honest and socialized with colleagues. Dr. Kim Dung always forces herself to work actively and scientifically, having plans in advance and keeping balance between the works given as well as being responsible and devoted.

In the development of the healthcare discipline in HCMC, Dr. Kim Dung has obtained recognizable achievements: title "Distinction Doctor"; 02 medals of "for the people health" and "for woman's development"; title "competitive worker on city level", party member "outstanding completion of mission 05 years" (2010-2015) and for years continuously achieved title "competitive worker on unit level" and many other certificates and recommendations.

In addition to fulfilling the professional and social works, Dr. Kim Dung - as the same with other Vietnamese women - is aware of her important responsibility and position in family. She is always the trustable and strong supporter for her children and making family a peaceful place for every member. For years, the family of Dr. Kim Dung has continuously achieved the title "Educated family" in the residence.

For almost 30 years of working, the achievements of Dr. Kim Dung have contributed significantly to the development of the country in general as well as of the health in specific. The results obtained by thousands of women who were honored demonstrate the potential and spreading of the campaign "good in doing nation's work, good in doing house chores".



Dr. Specialist II. Trương Thị Kim Dung (the 4th from left to right) received 14th KOVA Awards 2016 for category "creation" with the hospital's employees.

Thanks to Dr. Kim Dung for always being responsible and serious in working, which follows the morality and style of Ho Chi Minh. Personally, I - a doctor who is working in Diagnostic imaging faculty - am willing to follow Dr. Specialist II. Kim Dung to restlessly train myself, improve professional knowledge with the target of "all for taking care of patients" and be enthusiastic and actively participate in activities of the hospital as well as fulfill my responsibility.

THE ACTIVITY "RETURNING TO ORIGIN" OF THE BLOOD TRANSFUSION-HEMATOLOGY HOSPITAL'S YOUTH UNION

As to celebrate the Youth month 2018 and 87 years anniversary of establishing the Ho Chi Minh communist youth union (26/03/1931 - 26/03/2018). The Youth Union of Blood Transfusion - Hematology hospital has organized the activity "Returning to origin" at forest Vam Sac - Can Gio. By participating voluntarily into the campaign, it helped to expand the solidarity among participants, concentrate the youth as well as enhance the structure of Union and contribute to the solidarity between Union branches.



STUDY OF OCCULT HEPATITIS B IN BLOOD DONATORS AT THE BLOOD TRANSFUSION- HEMATOLOGY HOSPITAL

MSc. Dr Tran Thi Trang
MSc. Nguyen Thanh Son



1 Overview of occult hepatitis B

Hepatitis B (HBV) is one of the most common infectious disease in the world with about 2 billion affected patients. HBV virus invades through blood, therefore can be able to widespread easily through blood products which contain virulent source. Hence, transfusing blood contained HBV is critically risky in developing nations where the infection rate is high and the blood examination procedure is not closely monitored. Blood and products from blood have been examined for serological screening before use. However, the researchers have discovered some cases of infected hepatitis B due to blood transfusion. This fact showed that in blood and its products have occult HBV (antigen of HBV which is unable to recognize by serological screening but contains DNA of HBV). Occult HBV produces a very low DNA indication in blood, therefore, the technique of Nucleic Acid Amplification Testing - NAT) is used at the hospital to improve blood screening. In this research, we evaluated the infection rate of occult HBV infection (OBI) in blood donators who had negative result in serological screening.

2. Subject and Methodology

The research was conducted on blood donators at the HCMC Blood Transfusion - Hematology hospital from January 2016 to December 2016. Samples which were negative to HBsAg serological screening were proceeded with molecular

biotechnology of HBV DNA to determine the rate of occult HBV.

3. Results

We have took HBsAg examination on 176561 samples and there were 3700 (2%) samples gave positive results. Among them, infected male samples covered the percentage of 63.4% and female sample of 36.6%. Examination of HBV-DNA on the negative samples gave the result that 169 out of 172861 samples (0.097%) were positive to HBV-DNA; which means about 10 out of 10000 people have occult HBV. By using NAT, we have discovered 169 cases of OBI which might potentially infect HBV to patients who use blood products at the hospital

The percentage of positive HBsAg in this research was consistent with the reported value of WHO (on 3rd July 2017) on infection rate of HBV in South East Asia(7). In comparison between the rate of HBV infection in Dr. Kim Dung and partners research with the previous recordings at Blood Transfusion - Hematology hospital, the infection rate steadily decreased, which shows that the examination of HBV at Blood Transfusion - Hematology hospital has been monitored better, from the communication and encouragement of repeat blood donation to the checking of donated blood samples. In addition, the improvements in technology and general awareness also helps people in obtaining necessary information and prevention

of infectious diseases, taking medical examination regularly and early detection of disease symptoms. Therefore, the infection rate of HBV has reduced dramatically. However, according to Weber B (2002), false negative and insignificant results might occur in the following situations: window stage at the end of incubation period when the synthesis of HBsAg is inadequate for determination by immune methodology, people who have low concentration of HBsAg, mutated and transformed S gene, co-infection with HCV can prevent the reproduce of HBV or the performance of HBsAg (6)

The rate of OBI in our research was higher than other studies in the world. Specifically, it was 1.67 times and 2.69 times higher than the researches of Rajesh Kumar and partners (2) and of Soisaang Ph. (3). In contrast, it was significantly lower compared to the research of K.T.Lin and partners (1). It was due to the specific infectious situation in different nations and regions. Compared to the rate of OBI investigated by different research groups nationally, our result was also higher than that of National Institute of Hematology and Blood Transfusion in 2014-2015 (0.079%) (5). This difference might be due to the different sensitiveness and methodology applied in the preparation and detection of DNA.

NAT is one of the most advanced techniques at present which has been permitted to use in blood screening by the Health Ministry. This technique directly detects DNA or RNA of virus and is able to identify virus in blood earlier than other methods of serological screening. Our study indicated that if NAT technique had not been applied for blood screening at Blood Transfusion-Hematology hospital, in 2016 there would be about 169 cases of infected HBV which was neglected by serological screening, covered for approximately 0.097%, meaning that for every 10,000 blood donors, there would be 10 people have occult HBV, who would infect other blood receivers. In addition, with the current situation that one bag of blood is often processed to make three to four

corresponding blood products, which means about 207 to 676 blood receivers would have to face the risk of being infected by occult HBV. This number, indeed, is worth to be considered carefully.

In conclusion, it is necessary to encourage the diagnostic application of NAT. Firstly, it helps to detect early the disease for better prevention and treatment; secondly, it protects the blood receivers from infectious diseases via blood transfusion. The screening technique of NAT has been applied in Vietnam since 2015 in big blood banks, but not been well-aware in general. Therefore, it needs to be communicated widely as well as to combine serological screening with NAT to minimize the infection of HBV through blood transfusion.

4. References

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Kỹ thuật NAT được triển khai tại khoa Sàng lọc máu
(1): Hệ thống Cobas 6800; (2): Hệ thống Procleix Panther

STEM CELL TRANSPLANTATION FROM PERIPHERAL BLOOD CELLS

1. Key words:

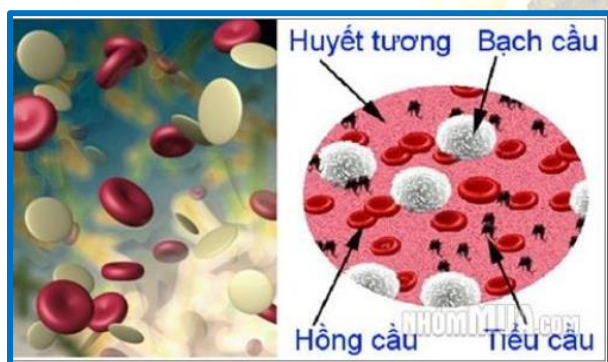
HLA = MHC: Human leukocyte antigen or Major histocompatibility complex

Transplantation of blood-forming stem cells = Transplantation of bone marrow

GvHD = graft versus host disease

Where to take blood stem cell to transplant for patients ?

Through thousand years of experience, our ancestors have concluded "one red blood drop is worthy than a pool of water" to emphasize the importance of close relatives - people who have blood- relationship with each other.



Nowadays, with the advance in technology, people can understand more about nature, including the human body.

Blood is biggest fluid tissue in the body, which consists of two parts: visible (hemoglobin) and plasma. The main function of blood is providing nutrition and constructing the organs as well as releasing waste during the metabolism of the body. In addition, blood contains leukocyte and antibodies which protect the body against the invasion of pathogenic factors or the internal mistakes which may cause disease inside the body.

Moreover, in blood there is another special kind of cell - blood-forming stem cell - moving

freely with tiny density (about 3-5/10.000 leukocyte). With some specific procedures, we can mobilize sufficient amount of these cells from bone marrow to blood for transplantation without taking out the bone marrow of donator. For that reason, the phrase "blood-forming stem cell transplantation" eventually replaces the term "bone marrow transplantation" and donators do not have to suffer a lot of pain like before.

The average amount of blood in adult is 75 mL/kg of body weight (for female it is 70 mL/kg and 80 mL/kg in male), which means a normal person has about 5L of blood

Analytically, a drop of blood has approximately 400 million red blood cells, 600.000 leukocytes and 25 million platelets which contains full genetic information of the body.

With that huge amount of cells, blood is the life storage and operation of any biological species. We only need to take the blood-forming stem cell from peripheral blood.

A special source of stem cell is umbilical cord blood, which has been demonstrated to be valuable and potential for treatment.

2. Blood-forming stem cell transplantation - A method to restore damaged blood forming system.

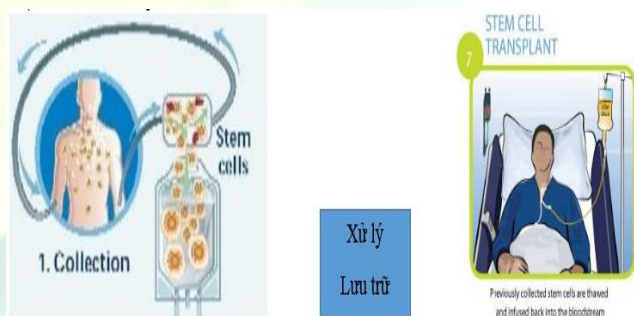
In 1957, Thomas et al reported the first clinical case which showed cell reproduction after transfusing a large amount of bone marrow fluid through intravenous vein. Since that, bone marrow transplantation has been developed and become the only treatment for many uncured diseases from malignant to inherited and acquired.

Since July 1995, bone marrow transplantation has been applied to treat hematological diseases at the Center for blood transfusion and hematology,

which is now the HCMC Blood Transfusion - Hematology hospital and achieved significant success.

Based on the procedure and disease, the source for stem cell can be from patients themselves after temporary treatment or from healthy donator or umbilical cord blood. Therefore, stem cell transplantation can be homogenous (from patients themselves), heterogeneous (from another healthy donator), umbilical cord blood (stem cell taken from umbilical cord blood of patient or other people).

By transplanting health blood-forming stem cells, the blood forming system of patients can be completely restored and developed as normal.



(Internet: demonstration of processes from stem cell collection to transplantation)

3. Haploidentical transplant - Life saver for no complete identical HLA or high risk malignantly hematological diseases.

First requirement for the success of transplantation is the grafts have to be able to reproduce in the receiver's body. Hence, the identity of HLA is the basic requirement for selecting donator.

Classically, the more different HLA, the higher possibility of waste transplantation (unable to reproduce) and GvHD occurred

In practice, not all patients are lucky enough to have donator with completely identical graft (HLA) or be transplanted with one like that in time. In addition, because of the preference to have less children at present, the possibility to find siblings with completely identical HLA is difficult.



Genetically, parents and children share half genetics (the child's genetics is half from father and half from mother), siblings share at least half genetic identification. (*Demonstration of genetic inheritance from parents to children* - source: internet)

Patients will have high chance to find suitable donators with half-identical genetics (haploidentical). That would be brother - sister, parents, or even close relatives...

By using the technique of haploidentical transplant, donator and receiver can be different in less than 3 antigens of the identical tissues HLA-A, HLA-B and HLA-DRB1, which means they have blood relationship.

Consequently, the GvHD reaction would be very serious if occurred and is the leading cause of death in transplantation. In contrast, if be able to control GvHD, this technique increases significantly the graft versus leukocyte (GvL) reaction and helps the patient's immune system destroy the existed leukemia, which in turn increases the potential of curing disease.

Hence, except the case where could not be able to find healthy donator with completely identical HLA, haploidentical transplant is used predominantly for high-risk cases, recurring or even recurring after transplantation.

4. Conclusion

Since 1957, the history of bone marrow - blood-forming stem cell transplantation is developing unstoppably. In 1994, with the difference of 3 HLA, Anasetti et al observed 80% GvHD, which was even symbolized as Anasetti's curse. With the increasing knowledge on blood formation, the technology of stem cell transplantation is breaking natural limits and creating.

Dr. Le Thanh Chang

SYMPTOMS OF DAMAGED PERIPHERAL NERVOUS SYSTEM IN

MULTIPLE MYELOMA

I. Goal

The goal of this guideline is to improve the knowledge on peripheral nervous system disease (PNSD). Firstly, it will indicate what peripheral nervous system is and how it works, the symptoms of disease and what it may cause on patients with multiple myeloma, and finally explain how to manage the disease.

The information in this guideline do not replace professional advices from Doctors and other member of healthcare group. They are the best people to seek advice if you have clinical problems. This guideline just provides some beneficial hints for patients with multiple myeloma

We, the Treatment group, advise patients to read this guideline before starting treatment. By recognizing the initial symptoms of PNSD and reporting to doctor or nurse, patients and their family can reduce the severity or development of symptoms, and prevent the possibility of unrestorable nervous damage

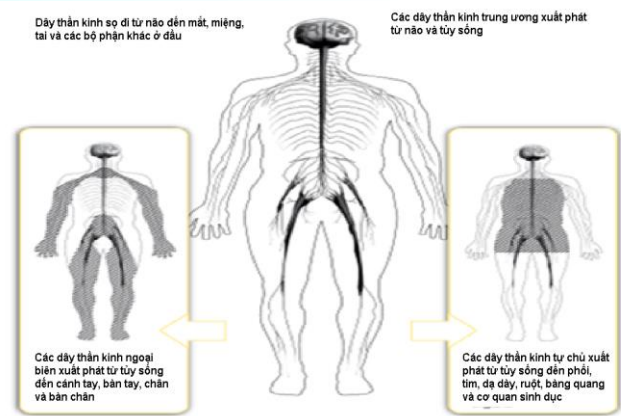
II. INTRODUCTION OF PERIPHERAL NERVOUS SYSTEM

The human nervous system includes:

- Central nervous system, including brain and spinal core
- Cranial nerves, which contains 12 nerves from brain to organs on the head, including eyes, nose, ears, tongue... and some other organs.
- peripheral nervous system (PNS) which consists of all other nerves outside the brain and spinal cord, including: nerves in arms, biceps, hands, fingers, thighs, legs, feet, toes.
- Autonomic nervous system (ANS), which was previously called vegetative nervous system,

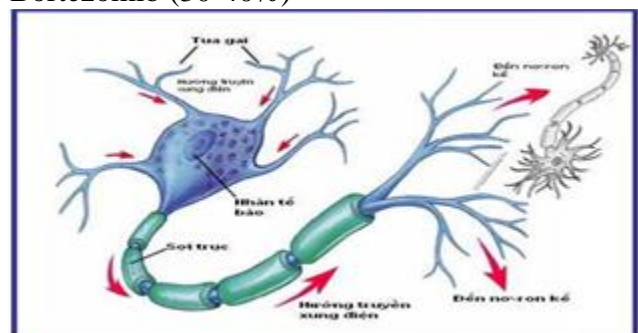
including nerves which control unconscious activities and regulate body functions such as heart rate, respiratory rate, digestion, urination and sexual arousal.

Figure 1: The nervous systems in the body



Source: National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health.

PNSD describes the damages of nervous system which cause the decline in function and symptoms associated in affected nerves. This is a common side effect, which may be caused by the disease (appeared in the diagnosis with the rate of 10-15%) but more often associated with some therapeutic treatments. Some medicines which may produce it are Vinca alkaloids (30-40%), derivatives of Platinum (30%), Thalidomide (50-70%) and Bortezomib (30-40%)



III. CLINICAL SYMPTOMS

Because the longest nerve is often affected first, the symptoms usually start from toes and move to ankle and leg. In the upper part of the body, the symptoms start from fingers, then move to hand and arm. The symptoms caused by medicine are often symmetrical in both left and right:

*** Some symptoms of damaged sensory nerves:**

- Tingling, numbness or pain in hand or foot
- Feeling hot and burning in hand or foot
- Feeling of wearing gloves or long socks
- Loss sensation when being collided gently
- Increased feeling hurt when being touched, usually at night
- Reduce or loss of deep tendon reflex.
- Change in stimulated sensory - receive false information, such as: feeling hot when touching cold objects or not awaring of putting foot on land which increases the risk of falling.
- Unable to maintain balance when closing eyes
- Difficult in hearing, often hear like ringing the bell or tinnitus
- Loss of feeling hurt or the changes in temperature, which can easily lead to injury

*** Some symptoms of damaged motor nerves:**

- Cramps, muscle contraction
- Unconditional muscle spasms
- Reduced reflex
- Difficulty in wearing button or writing
- Difficulty in taking or feeling the shape of small objects
- Difficulty in standing up from sitting position
- Improper walking or increased risk of falling

*** Some symptoms of damaged autonomic nerves:**

- Feeling dizzy when standing up or sitting down
- Diarrhea or constipation
- Feeling full earlier than usual when eating
- Erectile dysfunction

*** Some factors which aggravate the damage.**

- Smoking: prevent circulation and nervous transmission
- Alcoholism: malnutrition, reducing absorption and metabolism of vitamins (B1, B12 and folate)
- Diabetes: should monitor the level of sugar in blood
- Infection (bacteria, shingles..)
- Some therapeutic medicines and other non-cancer treatment

IV. EVALUATING METHODS

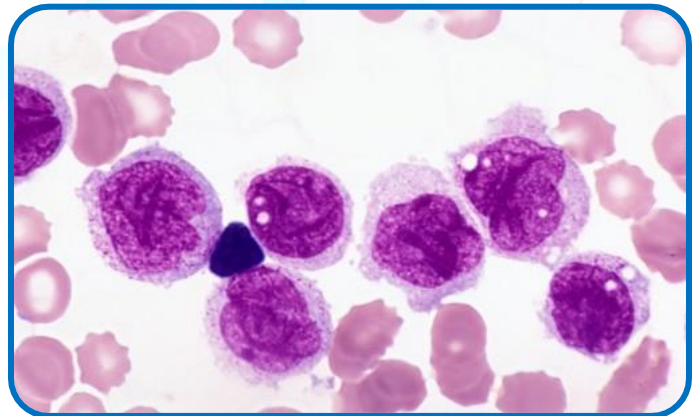


Table 1: Questions for self-assessment of neuropathy. This is Functional Assessment of Cancer Therapy/Gynecologic Oncology Group–Neurotoxicity (FACT/GOG-Ntx) questionnaire:

FUNCTIONAL ASSESSMENT IN CANCER THERAPY/ NEUROTOXICITY QUESTIONNAIRE			
Patient performs the self-assessment based on the following table:			
0	Not at all	NTX4	I feel discomfort in my feet.
1	A little bit	NTX5	I have joint pain or muscle cramps
2	Somewhat	H12	I feel weak all over
3	Quite a bit	NTX6	I have trouble

			hearing.
4	Very much	NTX7	I get a ringing or buzzing in my ears.
NTX1	I have numbness or tingling in my hands.	NTX8	I have trouble buttoning buttons
NTX2	I have numbness or tingling in my feet.	NTX9	I have trouble feeling the shape of small objects when they are in my hand.
NTX3	I feel discomfort in my hand.	An6	I have trouble walking.

V. SOME GUIDANCES FOR PATIENTS AND FAMILIES

As soon as signs and symptoms of peripheral neuropathy are recognized, patients and families should:

- Report these signs and symptoms to the doctors or nurses in charge which are the ones may help you in treating the symptoms.
- Your doctors may prescribe some medications to treat your symptoms, or decrease the medication doses until the symptoms are improved, or even stop the treatment.
- If you are currently using Bortezomib and you have a high risk of peripheral neuropathy or you actually experience the symptoms, please ask the doctor about subcutaneous Bortezomib (subcutaneous Bortezomib is less likely to cause peripheral neuropathy as well as less related to severe peripheral neuropathy than intravenous dosage form)

Please ask your doctors about daily strategies (supporting measures) to reduce the symptoms of peripheral neuropathy :

1. Exercises to increase blood circulation and brain oxygenation
2. Balanced diet with fresh food, sources of vitamin B6, vitamin B12, vitamin D, folate and healthy fat may help to protect the nervous system. The goal should be the consumption of the diet rich in fresh fruits, vegetables, whole grains, and fish with high fatty acids content
- 3 Prevent medication-related constipation by consuming fiber, and using appropriate stool softeners and laxatives (also to prevent the side effects of analgesics)
4. Drink a lot of water and other non-alcoholic drinks
5. Patients are encouraged to give up smoking and drinking alcohols
- 6 High blood sugar level also affects peripheral nervous system and nerves. Glucocorticoids being used in treatment protocol of multiple myeloma

Table 2: Common Terminology Criteria for Peripheral Neuropathy and Neuropathic Pain of National Cancer Institute (NCI). This is the most popular assessment criteria today.

Sensory Grade	Symptoms
1	Asymptomatic: loss of deep tendon reflexes or paresthesia
2	Moderate symptoms: limiting instrumental activities of daily living
3	Severe symptoms: limiting self-care activities of daily living
4	Life-threatening consequences: urgent intervention indicated
5	Death

such as dexamethasone and prednisolone may raise the blood glucose level -> the glucose level should be closely monitored

7. Patients with autonomic dysfunctions should be always cautious and they should avoid the tasks required a lot of strength and they must also drive and control the machines very carefully

VI. CONCLUSION

Peripheral neuropathy is a severe complication of multiple myeloma and medications used to treat multiple myeloma, and this might cause the dysfunctions in all autonomic, sensory and motor functions.

In most of the cases, the damage might be recovered by treating the multiple myeloma cause and adjusting appropriately the medications as well as the dose and frequency of medications (such as reducing the doses, extend the dosing frequency/or

stopping the medications and initiating the supportive therapies in order to obtain the optimal outcome)

Early detection and timely intervention of peripheral neuropathy is closely related to the improvement of patient quality of life and treatment outcome.

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Eating For Balance!

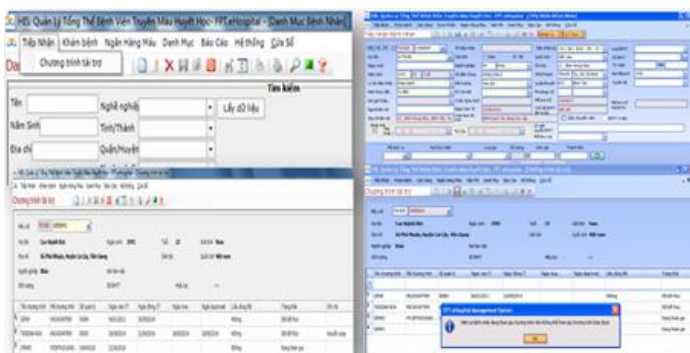


Dr. NGUYỄN HỮU TUẤN
MSc. Dr Co Nguyen Phuong Dung
MSc. Dr Tran Quoc Tuan

MANAGEMENT MODULE PROGRAM OF SPONSORED MEDICATIONS (GLIVEC, TASIGNA): AN EFFECTIVE WAY TO MANAGE AND CONTROL THE MEDICATIONS IN PROGRAM

With the essential need of availability of computer program to effectively manage the medications in the sponsored programs, Blood Transfusion – Hematology Hospital has designed the system has called “Management module of sponsored medications (Glivec, Tasigna)” based on the available patient data in E-hospital system. The program is highly practical and easy to use, their alarm function is also extremely effective.

Improve the quality of medication program by information technology



The Blood Transfusion – Hematology Hospital have implemented and managed three sponsored medication programs for patients diagnosed with chronic myeloid leukemia (CML) who have positive results of Philadelphia chromosome test. The disease is treated by enzyme inhibitors, more specifically tyrosine kinases inhibitors (TKIs). These targeted cancer therapies are very expensive, so almost none patients could have enough financial resources to pay for the treatment. In Vietnam, there are only two TKI medications, Imatinib as the 1st generation TKI (brand name: Glivec) and Nilotinib as the 2nd generation TKI (brand name: Tasigna). Upon experiencing the treatment failure when using 1st generation TKI, the patient should be switched to 2nd generation medications. These medications should be used in the treatment in outpatient setting.

The three medication programs are described below. *Glivec International Assistance Program* (GIPAP) provides free Glivec 100 mg to the patient without medical insurance or the patient participated in the insurance program less than 36 continuous months. *Vietnam Patient Assistance Program* (VPAP) provides Glivec 100 mg (VPAP1) and Tasigna 200 mg (VPAP2) for the patients who have participated in the insurance for more than 36 continuous months. *Norvatis Oncology Access TASIGNA* (NOA TASIGNA) provide sa part of Tasigna 200 mg to patients.

From 2006 to 2015, the medication sponsored programs had been managed via Excel sheets. However, there were about 100 new patients enrolled in the sponsored programs every year. In addition, the patients in the hospital may switch from one program to another. The reason for this change is: patients have participated in the medical insurance for more than 36 continuous months, so they may switch from GIPAP to VPAP1, or from TASIGNA NOA to VPAP2. Patients may stop using Glivec because the Imatinib (1st generation TKI) resistance mutation(s) is suddenly identified or the patients experience adverse side effects. Some may switch to Nilotinib (2nd generation TKI). In addition, there might be some patients experience severe side effects of Nilotinib or harbor drug resistance gene(s).

Due to these complexities, the management sponsored drugs by Excel possesses some limitations such as: the data between different departments (clinical departments, department of general planning, Pharmacy department, and department of finance and accounting) were not mapped and synced; each department and unit created a separate management file, so the data were entered separately, so the same administrative information were entered many times and each unit

must generate a separate report. Therefore, it was very difficult to obtain the comprehensive monitoring report integrated with all essential information for each patient.

At the same time, the hospital already has the E-hospital software, the network information system, that can storage and manage the patients' administrative information, test results, prescriptions, ... and connected these data to different departments. Therefore, the staff of the hospital had designed the program called "Management module program of sponsored medications (Glivec, Tasigna)" and implemented this software throughout all hospital departments.

Highly applicable functions of the system

The management module program of sponsored medications has the three major functions:

Data input functions

- Obtain the administrative information, disease progress, service indications (tests, imaging, clinical interventions) of patients from E-hospital system.

- The management checkpoints of data input function of the program include: confirm the number of years participating in insurance (3 years), select the name of sponsored program and program code, management ID, starting date of the program, ending date of the program, initiating dose, disease status.

- The management ID of VPAP1 and VPAP2 program are allocated by the program and based on the time of input. The general formula for ID is:

Name of the program + BTH + YYYY MM DD

⇒ Note: Abbreviation: VP1 = VPAP1 (Glivec); VP2 = VPAP2 (Tasigna), BTH is the abbreviation for Blood Transfusion-Hematology Hospital. For example: VP2 BTH 2016 06 06

- Outpatient department import the Glivec or Tasigna (depends on the program) from the storerooms for insured medications or sponsored medications.

- Providing that the patient stops enrolling to one program in order to switch to another program, he or she will not be received the medication of the older program.

- The information that the Pharmacy Department controls and manages includes: name of

medications and their dosage, ID Number of medication requisition form, total number of owned medication packages, number of packages in this requisition, number of packages returned, number of exported medications.

Alarm function

Re-approved date, date of purchase of Tasigna dose, alert of patients with duplicate management ID, the alert "The patient is currently enrolling in this program, so he/she cannot enroll in any other programs."

Report generation function

Upon the request from Director's board, social insurance organization, and Max Foundation Organization, various departments and units related to the sponsored programs may see and generate the report from the module program.

Efficiency of the management program and potential of spreading the program.

After implementing and using the "Management module of sponsored medications (Glivec, Tasigna)", the hospital has gradually increased the efficiency of management of the sponsored medications. For example, each patient can only participate in one out of three sponsored programs at one moment. Once the patient withdraws from the program, the nurses cannot order the drug from the medication storeroom for this program.

With the mapping and syncing the data from different departments as well as four types of alarm, the hospital have minimized the errors related to medications management and solved the existing problems associated with medication usage — remind the doctors to finish the extension procedure on time and remind the patients to purchase the medications on time. The program can also access to ten types of reports as well as limit errors and data loss upon the change of management staff.

"Management module of sponsored medications (Glivec, Tasigna)" is the technological product which has high applicability, ease of use, and efficient alarm system. As a result, the module might be adopted by hospitals that long for a computer program for the management of sponsored medications or expensive medications.

PREVENTION OF THE WRONG-PATIENT ERROR IN BLOOD TRANSFUSION

The process of patient care, giving treatment to wrong patient is one of the potential medical errors that might generate different consequences with varied degrees, from mild to very severe ones. In blood transfusion, wrong-patient error may lead to the most adverse consequence – death of the patients. Therefore, identification of the right patient is the most critical goal of the patient safety assurance program (according to Joint Commission International), especially in blood transfusion safety. In this article, we want to share two clinical situations which entail the potential wrong-patient error in blood transfusion ... but almost no one “expects” which.

1. The first situation: wrong blood sample

The nurses send the blood tubes that was drawn before to the laboratory for the blood typing and other associated tests. The situation usually happens at the Pediatric departments or emergency rooms where venipuncture is very difficult to perform and painful to patients, thus nurses often draw large volume of blood for many test tubes at once. As a result, the labels on the test tubes might not be clear.

Consequence: there is a risk of wrong test results, leading to the provision of the wrong blood pack to the patients. As a result, the patients might receive the blood pack with a mismatched blood type if the bedside blood typing is not performed appropriately.

Prevention: Identify the right blood samples of patients by following the guideline, and only drawing the patient blood after identity of the patient is confirmed – Label the test tubes at bedside (by sticking the barcode or hand-writing)

at the bedside (sufficient and clear information: Full name, age, address, Patient ID) — Never pre-label the test tubes for two or more patients, then bring these tubes to the bedside to perform the venipuncture.

2. The second situation “Open period” after bedside blood typing

The nurse identifies the right patient, drawing the blood for the bedside blood typing and compatibility tests. While the nurse waits for the doctor, he or she goes away to do another task. The doctor suddenly comes and sees that the blood typing result is right, then write the treatment instruction without confirming the identity of the patient. The nurse come back and perform the transfusion procedure.

Consequence: There is a risk of transfusing the blood with mismatched group to the patient because the patient may leave the bed for a while to do something (for example: go to a toilet) and another patient may occupy the empty bed ... The similar consequence may also present when the nurse performs the blood typing at the bedside but the doctor does not read the result at the bed side (the nurse might bring the result and give it to the doctor at different location).

Prevention: There should be two people perform the bedside blood typing and they might read the result separately. The blood typing should be performed when the patient is on the bed, and it should be carried out right before the blood transfusion procedure is taken place. If there is an open “period”, the testing procedure should be repeated.

Nurse. Le Thi Son

SOME USEFUL DIETARY ADVICES FOR IMMUNOCOMPROMISED PEOPLE

EAT THE COOKED FOOD, DRINK THE BOILED



Wash the fruits and vegetables

under a strong water flow, then soak them in saline solution or veggie cleaning solution before the consumption, do not wash the vegetables and fruits with soap or



coming out, the recommended cooking temperature is 100 °C

- ✓ Cook meat and fish very carefully
- ✓ Cut the frozen tofu, then boil the tofu pieces for at least 5 minutes before cooking them

Food choice:

- ✓ Choose the freshest foods, do not purchase the food passed the expiry date
- ✓ Check the manufacturing date and expiry date
- ✓ Choose the clean fruits and vegetables.



Store the food at the temperature $\leq 4\text{ }^{\circ}\text{C}$



The use of cooking tools:

- ✓ Always use clean knives to cut different types of food
- ✓ Wipe and clean regularly the kitchen, eating tables by using specialized soap and washing liquid – Change the utensil scrubbers frequently.
- ✓ Separate the raw food and cooked food on the table



Cleaning the outer surface of **can foods** before opening a can.

- ✓ Consume food immediately after the food is cooked
- ✓ Defrost the food by using the microwave oven, do not re-freeze the food that have been defrosted
- ✓ Drink the cooled boiled water or sterilized water, sterilized fruit juices.
- ✓ Drink the pasteurized milk

Eating out:

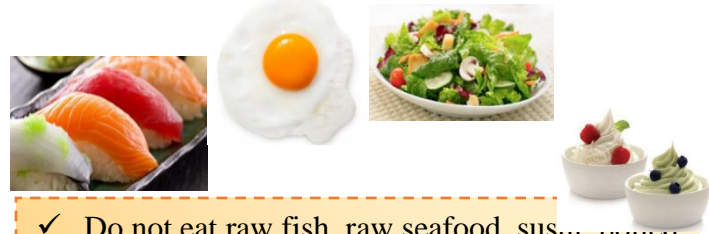
- ✓ Eat out early and avoid the crowd
- ✓ Use the separate set of dipping sauces

SOME USEFUL DIETARY ADVICES FOR IMMUNOCOMPROMISED PEOPLE



DO NOT CONSUME THE UNSAFE FOOD

Do not purchase the can foods with distorted, deformed, swelled, rusty cans – Ensure that the packages are not torn and opened



Do not consume the food at food trolleys, fast-food stores, food vendors

Do not try the free food samples



- ✓ Do not eat raw fish, raw seafood, sushi, bones, peanuts
- ✓ Do not eat half-cooked eggs or fried eggs, limited the food containing traces of raw eggs such as mayonnaise
- ✓ Do not consume raw milk or unpasteurized dairy products
- ✓ Do not consume prepared salads in the supermarket, and creams that are not frozen
- ✓ Do not eat the food with high infection risks such as: prepared salads, buffet or street food
- ✓ Do not eat raw vegetables and raw meat
- ✓ Do not drink fruit juices in restaurants, cafeteria
- ✓ Put the spoons, forks, chopsticks on the tray – Do not put them directly on the table surface

Do not keep the COOKED food exposed to the outer air more than two hours, especially in the hot weather because the food may get spoiled easily



Do not keep the food having eggs or mayonnaise out of the fridge more than one hour.



Do not consume cracked eggs and spoiled foods (must not taste the sample)

The isolated patient due to neutropenia should consume the unpeeled fruits and cooked fruits (the best) such as cooked banana and should not eat raw vegetables



Do not eat the bruised or squishy fruits and do not purchase the pre-peeled fruits in the supermarket



- ✓ Do not use the meat-cutting knife to peel fruits
- ✓ Do not put the cooked food and raw food into one fridge

NOSOCOMICAL INFECTIONS

“Nosocomial infections are the infections acquired during the period when patients stay in hospitals or other healthcare facilities. The infections do not present or have not the incubation period at the time of hospital admission. Nosocomial infections are often acquired after 48-hours of hospital admission.”

Nosocomial infections are the potential threats for patients because they may increase the length of hospital stay, pains and discomforts to the affected patients, and they also cause the loss of working time and financial incomes of patients and families, generating a lot of anxiety and inconveniences. Socio-economic impacts of nosocomial infections on hospitals and the society are significant due to the increase in hospital costs, the use of antibiotics, and the rate of poor prognosis and mortality..

The etiologies of nosocomial infections have experienced a significant change for several recent decades and they are also varied between continents. Pathogenic bacteria might be Gram-negative bacilli, Gram-positive bacteria, fungi, or parasites. However, nosocomial infections due to multidrug resistant Gram-negative bacilli (ESBL, CRE, MDR-P, MDR-A) have been become the real disasters of hospitals. The rate of aminoglycosides and carbapenems resistance is rapidly increasing and the antibiotic resistant organisms have been widely spread over different continents, including Vietnam. The accelerated development also is equivalent to extremely rapidly raising rate of infections and deaths caused by multidrug resistant bacteria. Therefore, the effective use of antibiotics in healthcare facilities is an important factor affecting the antibiotic susceptibility of the bacteria. The misuse of antibiotics would increase the number of antibiotic resistant bacteria due to the natural selection as well as the change in organism genetic makeup. The term “antibiotic resistant” is not strange to the people working with infectious diseases, however this phenomenon becomes more and more dangerous and urgent. As a result, there should be a cooperative effort that prevent the

humanity to go back to the pre-antibiotic era. World Health Organization (WHO) has stated that we are currently living in the antibiotic-dependent era, and WHO also demands that the whole world should have responsibility in the protection of valuable antibiotic resources for the future generation. However, the use of antibiotics in developing countries have generated a great number of mutated bacteria which are highly resistant to antibiotics. .

At Blood Transfusion-Hematology Hospital, the management board pays great attention to the nosocomial infections problem. The hospital has been promoting the infection control strategies by providing the hand-washing solution for every bed and the handpiece cleaning device for every patient room. This approach encourages the hand-washing activities, reducing the nosocomial infection rate. Furthermore, the hospital also closely supervises the hand-washing policy and infection control strategies. The patients infected with multidrug resistant bacteria are separately isolated. Especially, the hospital has implemented the positive pressure systems at the isolation rooms for critically ill patients as well as the isolating area of department of stem cell transplantation. The use of sterile gloves in the care of patients is also extensively carried out at the isolating area of department of stem cell transplantation

The Blood Transfusion-Hematology Hospital also established antimicrobial stewardship committee in order to assign the tasks to each responsible unit/department. The tasks include: survey of nosocomial infections trend, collection and analysis data relevant to antibiotic resistance, building of the statistical models about antibiotic resistance at the hospital, development of treatment protocols for the use of empiric antibiotic therapies.

In addition, the hospital often inspects and monitors the antibiotic prescribing activities of the physician, the use of antibiotics in the restricted category, and antibiotic consultation reports to ensure that these activities comply to the relevant regulations. Furthermore, the hospital also has developed the SOPs and organized the training sessions for sample collection procedures, implementation of infection control strategies, stratification of the risks in accordance to antibiotic resistance degrees, de-escalation of antibiotic therapies, antibiotic therapies for multidrug resistant bacterial infections, establishment of restricted antibiotics list, inter-departments consultations, approval of antibiotic therapies; requisition and approval procedures for antibiotics

With the appropriate implementation of these activities, the nosocomial infection rate of the Blood Transfusion – Hematology Hospital was decreased from 14.2 % to 8.6 %, and the hospital also strives for the minimal rate of nosocomial infections as well as multidrug resistance organism infection rate; improving the quality of the patient care, reducing the treatment cost, limiting the undesirable outcomes related to the antibiotic use, preventing the raise of multidrug resistant bacteria, and ensuring the maximal safety for patients

THE CURRENT STATUS OF THE IMPLEMENTATION OF ACTIVITIES RELEVANT TO THE INFECTION CONTROL

The Ministry of Health have issued a variety of regulations, circulars in order to control and prevent nosocomial infections, as well as the rise of multidrug resistant bacteria. On 14th October 2009, The Ministry of Health promulgated the Circular No. 18/2009/TT-BYT on Guideline on the implementation of infection control in healthcare facilities. The additional regulations of Ministry of Health included: Decision No. 2174/QĐ-BYT dated 21st June 2013 approved the National action plan on combating drug resistance for the period from 2013 to 2020, Decision No. 772/QĐ-BYT dated 4th March 2016 on the issue of the “manual on management of the use of antibiotics on the hospital,” Set of criteria of Vietnamese hospital quality dated 18th November

2016 stipulated by The Minister of Health, The National action plan on the infection control in the healthcare facilities issued with Decision no. 1886/QĐ-BYT dated 16th May 2016 of Ministry of Health.

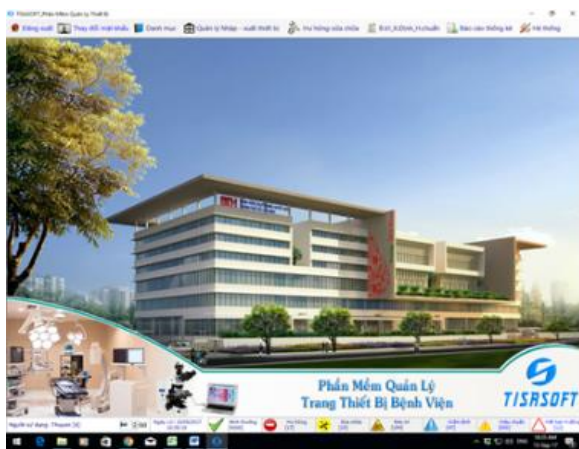
At Blood Transfusion-Hematology Hospital, the activities related to infection control are more and more enhanced and improved. The hospital has established enough relevant infection control committees and networks, including the Infection Control Surveillance Committees that includes the specifically appointed staff that have the responsibilities to oversee all infection control activities at the hospital-wide level. The department of infection control does the cross-sectional survey about infection control every quarter (I, II, III, IV), thus identifying the significant changes and proposing the interventional strategies for the reduction of nosocomial infections. Furthermore, the scientific researches related to the infection control are also be carried out annually, Some of the researches have been initiated such as “*Evaluation of the effectiveness of the alcohol-based hand-washing strategy before and after hand cleaning procedure*”, “*Application of the questionnaires in the tablet in the infection control activities*,” “*The surveillance of the hospital-acquired pneumonia in the hospital*”, “*The surveillance of the multidrug resistant bacteria in the hospital*”...

Furthermore, the hospital has provided sufficient hand-washing solutions at every bed and automatic hand cleaning devices for every patient-room, increased the surveillance of hand-washing procedures and infection control measures, isolated the patients infected with multidrug resistant bacteria, and especially equipped the isolation rooms for critically ill patients and the isolating area of department of stem cells transplantation with positive-pressure generators. It was shown that the nosocomial infection rate dropped from 14.2 % in 2016 to 8.6 % in 2017. With the implemented strategies and activities, the nosocomial infection rate in the hospital is expected to continue decreasing.

Duong Ba Vu

INTRODUCTION OF EQUIPMENT MANAGEMENT SOFTWARE

The equipment management software is designed for the monitor of the equipment purchases, devices repair and maintenance, equipment verification/calibration; as well as for the generation of the statistical report regarding the devices' use at each department, controlling tightly the equipment usage at each department and improving the management efficiency of technical responsibilities of department of materials – equipment. These might optimize the benefits of the hospital.



The software is used for the centralized management of each device (including names/models) at every department in every stage of purchase, operation, repair, maintenance, as well as verification, calibration, transfer, and clearance of the devices. Especially, the software allows the integration of information to the barcode of different equipment categories: the equipment tool, the devices borrowed from companies. The alarming function increase the efficiency of the surveillance of devices as well as help the management staff to timely know the status of each device.

Some major functions of the equipment management software.

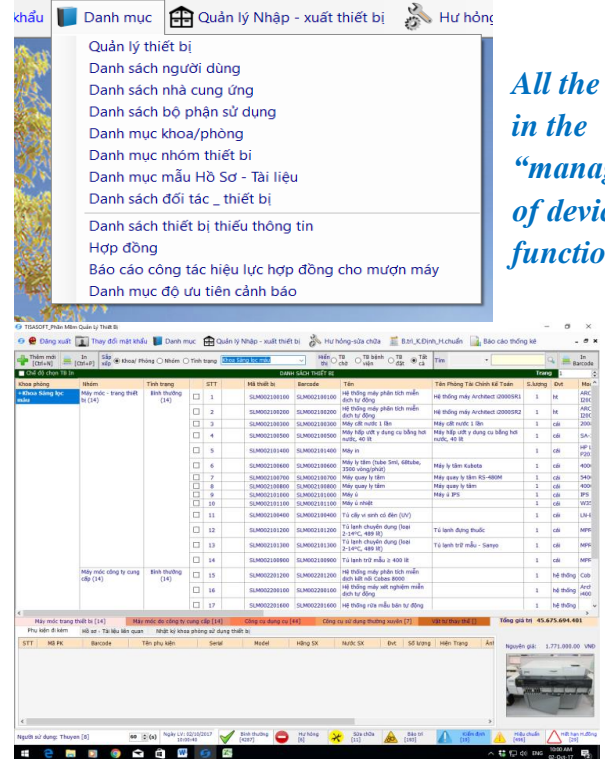
1. Management of devices

Manage the output information of each device such as: name, brand, model, serial number,

manufacturer, country of origin, original price, range of use, distributor, relevant documentation.

2. Monitor of the dysfunction and repair of devices

Each department/unit may directly report the dysfunction of devices via the software. The



All the items in the “management of devices” function

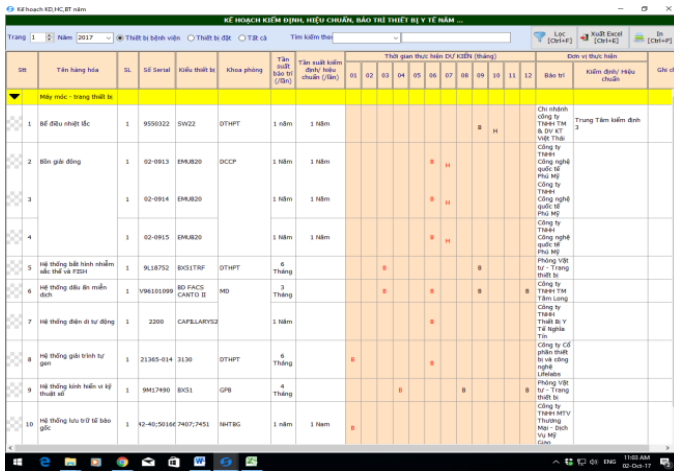
department of materials and equipment might record the information by using the alarming function and evaluate the dysfunctional equipment, ensuring that the repair is carried out promptly and continuously.

- Requisition of repair request from the department/units using the device
- Result of the evaluation of dysfunctional devices and machines
- Outcomes of the repair of devices or machines



All the items in the “Dysfunctions and repairs of devices” function

3. Monitor and schedule the maintenance, verification/calibration plan



The items in the “Management of maintenance, verification/calibration plan” function)

The maintenance, verification and calibration process is critical for the quality assurance of the continuous operation of the highly precise devices. The mission of the department of materials and equipment is to fulfill all essential requirements and limit the errors as much as possible. The software can automatically generate the schedule for maintenance, verification/calibration of the devices, ensuring the proactive and timely management of the devices.

- Schedule of annual repair, verification/calibration of devices
- The results of repair, verification/calibration of devices
- The list of devices that have not been repaired, verified, calibrated in accordance to the schedule.

4. Clearance of the devices

The software provides sufficient information about dysfunctional devices or components with clearance status that will be transferred from departments/units to the department of materials and equipment. By using the “managing reports in chronological orders” function, the software can quickly find the cleared devices and associated documents.

5. Other functions

- Stratification of management responsibilities and assignment of data-entering and accessing rights in order to ensure the integrity and security of the devices.
- Transfer of the property and devices between departments/units in the hospital

- Budget management for the purchase, repair, verification/calibration of devices
- Generation of statistical reports
- Export and import devices in stock

6. Forms and reports in the software

The software provides a wide variety of forms and reports, including the hand-over report and acceptance report which help device users and the management staff to obtain the general view about the usage of the devices in the hospital. Some forms/reports of the software are named below:

List of dysfunctional devices waiting to be cleared	Report of import and export of devices in stock
Statistical report of dysfunctional/repaired devices	Report of borrowed and returned devices
List of newly purchased devices	Statistical report of maintenance verification calibration of devices

7. The use of the equipment management software for the executives

The monitor of list of devices, schedules of repair, verification/calibration ... is very important. In addition, the “alarm of dysfunctional devices” function integrated to the software puts the department of material and equipment become in the active position in solving the problems associated with dysfunctional devices as well as proposing the appropriate prevention and maintenance approaches. For users of devices: support in the completion of the report associated with the use of devices, allow the printing of the barcode and labels for devices, allow the annual check of device stock. For the departments/units using the devices: Allow the monitor of the number and status of the devices currently at the departments/units to have more effective plan to manage and use the devices, limit the loss and dysfunction of the devices as much as possible.

Tran Cam Thuyen

The first Blood Transfusion-Hematology congress was organized in 26th December 1985 in Ho Chi Minh City and The Ho Chi Minh Blood Transfusion-Hematology Association was officially recognized by the Decision no. 131/BCH/CK dated 19th February 1986 issued by Ho Chi Minh Medical Association and signed by Dr. Duong Quang Trung.

In a long period of more than 30 years, executive committees from different tenures have expressed a great effort to achieve a great number of successes, contributing to the development of medicine in the city as well in Vietnam.

30 YEARS – THE DEVELOPMENT ROAD



Associate Prof. Tran Van Be (MD) – Chair – Tenure: I-V (1985 – 2010)



Prof. Nguyen Tan Binh (MD) – Chair – Tenure: V (2010 – 2017)



Dr. Phu Chi Dung (MD, Specialist Level 2) – Chair – Tenure: VI (2017 – 2022)



The first bone marrow transplantation case in Vietnam, 1985



The first frozen hemopoietic stem cell transplantation case in Vietnam, 2005



The first HLA-haploidentical allogeneic stem cell transplantation case in Vietnam, 2013



The first unrelated peripheral hemopoietic stem cell transplantation on a patient with CMML in Vietnam, 2017

The congress of Ho Chi Minh Blood Transfusion-Hematology Association for the sixth tenure – 2017



TRAINING AND EDUCATION ACHIEVEMENTS

The association have acquired a number success in the organization of several annual workshops and conferences related to Blood Transfusion-Hematology for physicians and patients/families such as conferences about Thalassemia, Hemophilia, Stem Cell Transplantation, Chronic Myeloid Leukemia (CML), Multiple Myeloma ... The exception is the National Blood Transfusion-Hematology Conference which was held once every two years from 1995 to 2008, this conference's name has been changed to The South's Open Conference on Blood Transfusion-Hematology.

In addition to the success of the conference and workshop activities, the association have provided education and training in a wide variety of matters such as hematology laboratory tests, safety in blood transfusion. Furthermore, the association successfully transferred the “**Hematopoietic stem cell transplant**” technology to six friend hospitals in Vietnam, including Danang Oncology Hospital, Cho Ray Hospital, Nghe An Oncology Hospital, Bach Mai Hospital, Hue Central Hospital, Ho Chi Minh Oncology Hospital. In addition, the association cooperated with Blood Transfusion-Hematology Hospital in the organization of “Hemopoietic Stem Cell Transplantation” training course for the health professionals of **Calmette Hospital – Cambodia**. This is an important achievement for the development of Blood Transfusion-Hematology and Stem Cell Transplantation fields in Vietnam as the reputation of the association have been known by international friends.

INTERNATIONAL INTERGRATION

The association has established the relationships with many partners from different countries such as Belgium, Taiwan, South Korea, USA, Japan, France ... since 1985.

The association organized successfully some international conferences such as Asia Pacific Blood and Marrow Transplantation Group Conference (APBMT) in 2013, and Vietnamese-France Open Conferences once every 2 years.

The members of the association were chairs and speakers in various international conferences: APBMT, AFH, ASH, ACTO...



APBMT (Asia Pacific Blood and Marrow Transplantation Group) Conference in 2013



The 2nd Vietnamese-French Open Conference, 2012



The 4th Vietnamese-French Open Conference, 2016

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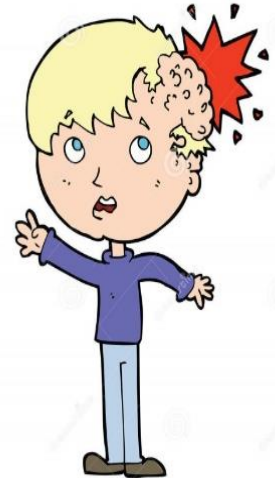
SIGNS AND MANAGEMENT OF HEAD INJURIES IN PATIENTS WITH HEMOPHILIA

I. Hemophilia and common complications:

- Hemophilia: a hemostatic disorder due to deficiency of blood clotting factors
- Complications: can cause natural bleeding in many places: bleeding in the skin, mucous membrane, bleeding in the muscles, joints, gastrointestinal bleeding, urinary tract bleeding, ..
- The most dangerous complication with a high death rate is cerebral hemorrhage, leaving many severe sequelae, affecting the quality of life later.
- A cerebral hemorrhage occurs after a head injury or may occur naturally without impact

II. Signs of head injuries:

- Impact on the head area
- Headache not relieving for 24 hours and pain increases
- Excited, sensitive to light
- Numbness, loss of feeling
- Nausea, vomiting
- Double vision, blurred vision, blind spots
- Suddenly weak
- Narcolepsy, confused
- Drowsiness, convulsions, sensory disturbances, coma



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- Cerebral bleeding can progress slowly, it may take several days to present clear symptoms
- Do not underestimate even the smallest symptoms. They can leave permanent brain damage, neurological sequelae and lifelong weakness.
- For children with suspected head injuries not seen by their parents, they should be treated as a head injury.

III. Management of head injury

- Dress the wound to stop bleeding, stabilize the neck in case of spinal cord injury suspicion, temporary fixation of fracture
- Quickly take the patient with the above symptoms to a hospital for blood clotting factor transfusion.
- Transfusion of blood clotting factors should be made prior to imaging diagnosis
- Do not take pain killers, as this will mask important symptoms.
- Blood clotting factors should be continued for 2 weeks

IV. Head injury prevention measures:

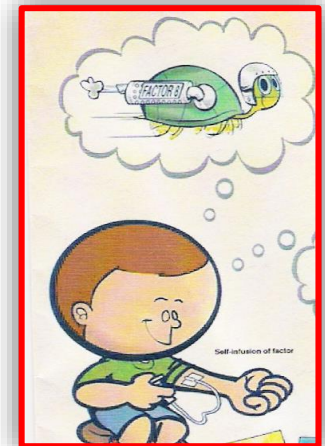
- Improve your understanding of head trauma in hemophilia, signs and symptoms of cerebral hemorrhage.
- Limit intensive activities, dangerous sports that can affect the head.
- Use a helmet when driving

- In addition, for children, avoid using furniture with sharp angles and keep sharp objects out of reach. Toddlers are more likely to fall, so should be accompanied by adults.



Dr. Nguyen Thanh Phong

INTRODUCTION TO “HOSPITAL IN THE HOME” IN HEMOPHILIA MANAGEMENT



In Vietnam, until now there is no “hospital in the home” program.

Based on the experience of countries that have implemented the “hospital in the home”

program, this program allows patients and their family to have a less dependence on the hospital by increasing independency and promoting early treatment of bleeding

“Hospital in the home” helps reduce the cost and time spent in hospital’s emergency rooms and allows patients to access preventive care for a normal home life.

When you are a patient with hemophilia or a caretaker, you need to learn the assessing and treating skills, and you must also understand that a safe disease management at home depends on your own skill level. You may be in situations where a medical intervention is required, so you must always contact a hemophilia specialist when you are in this program.

It is important to note that when you participate in “hospital in the home” program, you must understand the benefits and risks of this program, as well as your roles and responsibilities as you become more self-reliant in your own treatment

Benefits of “hospital in the home”:

“Hospital in the home” allows you to:

- ✓ Treat bleeding faster
- ✓ Become less dependent on hospitals, which means less time off work, off study
- ✓ Easily participate in preventive care programs to prevent joint diseases
- ✓ Participate in normal activities, including sports, and enjoy independency more



Risks of “hospital in the home”:

However, “hospital in the home” also presents some risks

- ✓ Pain, disability due to delayed required treatment
- ✓ Incorrect blood clotting dosage calculation, not aware of serious bleedings, not timely contact with hemophilia treatment center
- ✓ Not aware of side effects of coagulation factors
- ✓ Loss of blood clotting activity due to improper storage or out of date products
- ✓ Venous infection, central venous catheter
- ✓ Wounds due to improper use of needles



MD. (Grade II specialist) Nguyen Thi Hong Hoa

Nguồn: “Home treatment guide for people with bleeding disorders” by the Canadian Association of Nurses in Hemophilia Care

MEDICAL CHECK AND TREATMENT

Rituximab is a mouse / human mosaic monoclonal antibody that binds to CD20-specific antigen. This is the first monoclonal antibody to be accepted for cancer treatment, which has been shown to be effective and safe for patients with persistent or recurrent (low grade or cystic) CD20-positive diffuse B cell non-Hodgkin's lymphoma.

Intravenous - Over 50% of first-time rituximab infusions occur after injecting reactions.

One of the most common side effects of rituximab is a set of signs /

symptoms that occur within 30 to 120 minutes in the first contact. Common reactions include headache, fever, chills, sweating, skin rash, shortness of breath, mild hypotension, nausea, rhinitis, urticaria, pruritus, weakness and swollen neck throat and tongue (angioedema). Bronchospasm and/ or severe hypotension occur in less than 10% of all cases, whereas 3-4 degree reactions or anaphylactic reactions occur in below 5%. Most serious reactions occur in patients with high levels of cancer cells (such as CLL and lymphoma Mantle cell). For these patients, the doctor should divide the dose and take preventative measures

at the same time before injecting rituximab. For most patients, reactions usually occur shortly and will disappear when the transmission is stopped

Infusion reactions are less likely to occur at subsequent intervals. According to the manufacturer's report, the frequency of reactions was 70%, 30%, and 14%, respectively, for the first, fourth and eighth episodes of Rituximab infusion

Mechanism - The main cause of this reaction is related to the antigen-antibody response between Rituximab (antibody) and CD20 (antigen) on lymphocytes, which in turn releases cytokines from lymphocytes. Severe symptoms (pulmonary infiltration, acute respiratory distress syndrome, myocardial infarction, ventricular fibrillation, cardiac arrest and death) are more likely to occur in patients with high levels of target antigen-carrying cells (as in CLL) and with comorbidity. These reactions may decrease when rituximab is divided into several daily doses..

Prophylaxis

- Due to the high prevalence of patients with infusion reactions, in the current standard practice, acetaminophen (650mg orally) and diphenhydramine (50mg orally) are administered 30 minutes before the first and second rituximab doses. In addition, in some settings, a H2 antihistamine (ranitidin 50mg intravenously) is usually co-administered. If the reaction does not

INJECTING REACTIONS BY RITUXIMMAB

MECHANISM AND MANAGEMENT

occur in the first 2 doses, subsequent doses of rituximab may not need prophylaxis.

Pre-prophylaxis with acetaminophen and diphenhydramine reduces but does not prevent complete infusion reactions. Addition of a glucocorticoid prophylaxis (to prevent nausea / vomiting of chemotherapy drugs used in combination with rituximab) does not appear to reduce the incidence of severe reactions; In a report, grade 3 or 4 infusion reactions occurred at a rate of 10% despite the patient having been given prophylaxis. There are no reports evaluating the efficacy of a broader approach such as adding glucocorticoids \geq 12 hours prior to treatment. However, the author has successfully applied this method in some patients who have repeated severe infusion reactions.

Infusion rate - In order to reduce the risk of reactions, the rate of injection should be changed by slow initial injection and speed increasing later. Initial injection time $>$ 4 hours, the subsequent doses will be shorter if the first injection has no reaction.

The initial infusion rate of rituximab is usually 50mg / h. If no reaction occurs, an additional 50mg / h will be added every 30 minutes, at a maximum of 400mg / h. If the initial dose is well tolerated, subsequent infusions may start at 100 mg / h, then increase by about 100 mg / h every 30 minutes, up to 400 mg / h..

Patients taking a combination with other chemotherapeutic agents, who require glucocorticoids for vomiting prophylaxis, should be able to use the fast-paced infusion. **The first dose of rituximab is started at 50mg / h and increased gradually. All subsequent cycles of Rituximab could be administered within 90 minutes, with 20% of the dose in 30 minutes and the remaining used in 60 minutes.** This method is recommended by the FDA thanks to the results of the III trial RATE research, which is applicable to patients with non-Hodgkin's lymphoma (treated with R-CHOP or R-CVP regimen) with no grade 3/4 infusion reactions. The fast-paced infusion is not recommended for patients with cardiovascular diseases and high

circular levels of lymphocytes ($>5000 \text{ m}^2$) unless there has been no serious infusion reaction

Dosage division - In order to minimize the risk of severe infusion reactions, especially for patients with chronic lymphocytic leukemia (CLL) and high white blood cell counts. For example, first dose of 50 mg / m^2 , A second dose of (325 mg / m^2) is used on day 3 of the cycle. For patients with a white blood cell count $>$ 100,000 / mm^3 , Rituximab should be discontinued in the first cycle

Reaction management and re-administration - Patients with mild to moderate infusion reactions may temporarily stop taking the drug. Once the symptoms have been treated, patients may be able to tolerate the drug at a slower rate (half of the previous rate) and use acetaminophen in combination with antihistamines. If no reaction occurs then speed can be increased by 50mg/ hr up to a maximum of 400mg/ h.

In severe reactions, treatment should be initiated with normal saline, bronchodilators, oxygen support, epinephrine and hydrocortisone and do not re-administer the drug in the same day. For severe infusion reactions without signs of an anaphylactic shock, we may re-administer with prophylaxis (glucocorticoids such as 100mg hydrocortisone or 12mg dexamethasone in combination with H1 and H2 antihistamines the night before and 1 hour before re-administration) and dosage division (50mg / m^2 on day 1 and remaining dose on day 3).

Patients who still have an infusion reaction despite of using prophylaxis, desensitization may be used in some circumstances under the supervision of an allergist

Anaphylactic shock management - Patients with signs and symptoms of anaphylaxis should contact an allergist or an experienced cancer specialist in drug desensitization.

Other reactions - Some other less common infusion reactions associated with rituximab include Steven-Johnson syndrome, vesiculobullous dermatitis, and toxic epidermal necrolysis, which usually appear from 1 to 13 weeks after treatment. Patients with these

reactions should not reuse rituximab because of the risk of death

Serum sickness (a type 3 allergic reaction) that occurs with rituximab has been reported. Patients usually

respond to methylprednisolone and their symptoms will subside within 48 hours.

Subcutaneous injection (Rituximab hyaluronidase) is formulated to contain hyaluronidase as a permeability enhancer. The drug is injected within 5 minutes and is the option for patients with lymphoma who tolerate at least 1 IV rituximab dose.

Drug reactions occur in approximately 45-50% of patients receiving subcutaneous injections, despite of acetaminophen and antihistamine prophylaxis. In contrast to IV, the majority of reactions after subcutaneous injection are injection site reactions at levels 1 and 2 such as rash, itching, hardening, swelling and pain. Some reactions last longer than 24 hours after injection. However, systemic reactions also occur including chills, fever, nausea and vomiting, dyspnea, bronchospasm, urticaria, hypotension, angioedema, and anaphylactic shock.

In general, both site and systemic reactions are prevalent at the first dose, the proportion of patients reported with site responses and severity of responses decreased in subsequent cycles. Manufacturer recommends acetaminophen and antihistamine prophylaxis before each dose as well as considering glucocorticoid prophylaxis

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Vo Ngoc Thanh



Topic: FALL PREVENTION



PATIENT'S FALL CASE

Patient S. was currently receiving treatment at Department G. without a family carer. In the morning of 25/01/2018, the patient went into the toilet and fainted, falling and crushing his head into the sink. About 10 minutes later, he woke up and went to bed on his own. When a nurse came in, he told the nurse that he had fainted and fell in the toilet. A swelling injury in the posterior area of the left side, about 2 cm in



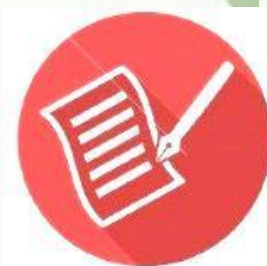
Reasons and factors associating with the patient's fall?

1. The person was subjective about his health so he went to the toilet without calling for support from medical staff.
2. Medical staff did not often visit, care for the patient / Unfriendly attitudes - > the patient was afraid to call for support.
3. Lack of safety handrails in the toilet.
4. Lack of warning signs where falls are likely to occur.
5. Lack of patient education about fall prevention for patients.
6. Lack of regulations on fall risk assessment and guidelines for fall management in hospitals



SOLUTIONS TO ADDRESS THIS PROBLEM ?

1. Build visual images to advise and educate patients on the prevention of falls so that they will read many times and be well aware of the fall risks.
2. Health workers must visit patients more often, be willing to support patients at all times, anywhere.
3. Long handrails should be provided from the toilet door to the toilet seat so that the handrails can be used when patients are in or out (for specific rooms).
4. Provide adequate "slippery" warning signs in all toilets and high risk locations.
5. Develop patient education and counseling materials to guide the use of equipments in the response to unexpected situations. Especially organize regular training sessions for health workers and patients on the emergency call system.
6. Issue Fall Assessment tools, Fall Identification Procedures, Guidelines for managing falls in the hospital and train health workers on this matter



INTRODUCTION OF ON-REQUEST UMBILICAL CORD STEM CELL STORAGE SERVICE

I. What are umbilical cord stem cells?

1. Umbilical cord blood, also known as placental blood, flows in the fetal circulation and supplies the developing fetus in the mother's uterus with nutrients, and it is the remaining in the umbilical cord and the placenta after delivery. In the past, the umbilical cord and the placenta after being removed from the baby was treated as a medical waste. Now umbilical cord blood is collected, processed, tested and stored so that when needed, it can be retrieved to treat your child or your family members.

2. Definition of stem cells: Stem cells are precursors, capable of self-growth, differentiating into different types of cells, tissues, and various organs of the body. As becoming mature, they perform the functions and tasks of various tissues and organs in the body.

In the early 1980's, newborn umbilical cord blood was confirmed to contain a large source of hematopoietic stem cells that could replace bone marrow stem cells, peripheral blood stem cells in the treatment of hematopoietic system disorders and IV. recently mesenchymal stem cells and epithelial cells have been detected and extracted in umbilical cord blood and placental stem cell transplant have also been used in many other medical fields: skin, corneal, cardiovascular, joint, neurological, type I diabetes, etc.

II. Benefits of storing placental blood for your child?

Umbilical cord blood, which can be stored for a long time, is a valuable source of stem cells for the treatment of the person themselves or family members and for the community and society.

So far, umbilical cord blood stem cells have been used to treat many haematopoietic system

disorders, genetic autoimmune disorders and had promising potentials for the field of reproductive medicine being researched and applied.

III. Strengths of stem cell bank - Blood Transfusion Hematology Hospital

Being the first stem cell bank in Vietnam established in 2002 and being a member of the Asia Cord blood Association (Asia CORD). So far, after more than 10 years of operation, the stem cell bank of Blood Transfusion Hematology Hospital has processed and stored more than 2,500 units of cord blood stem cells ready for requested stem cell transplantation.

BioArchive cord blood stem cell storage system, with liquid nitrogen -196°C , is fully automated, the most convenient and modern in the world. In Vietnam, our stem cell bank is the only one equipped with this system.

On July 5th, 2012, the Ministry of Health issued Decision No. 2352 / QD-BYT to recognize the eligibility and permission to operate the stem cell bank of Blood Transfusion Hematology Hospital.

Benefits of storing your child's placental blood at our stem cell bank of Blood Transfusion Hematology Hospital?

Pregnant women who register for the cord blood stem cell storage service at our hospital will be provided with the following benefits:

+ The most advanced testing system in the country that can perform tests for cord blood samples:

+ Identification of HLA-ABDR by PCR technology, carried out by experts trained in Japan, France, Belgium...

+ Counts of CD 34+ stem cells using the most modern FACS Canto II machine in the country,

6. You are pregnant at the age of 18 or under.

conducted by trained professionals in the United States.

+ Bacterial and viral screening by automatic, modern machines with highly sensitive and specific testing chemicals.

+ Having access to Stem cell transplant Department available when required.

Situations unsuitable for cord blood storage:

1. You have once been infected or positively tested with hepatitis B, C, HIV, HTLV1.
2. You have an type of cancers, or blood diseases such as myeloma,...
3. You have blood disorders or genetic or acquired immune system disorders.
4. You have sexually transmitted diseases including syphilis.
5. You have any complications or illnesses during pregnancy as well as childbirth.

Counselling for anemia

Question 1: My child is 7 years old, he has had a fever for 5 days, he had an examination and a blood test at the Children's Hospital. The doctors told us that he is anemic, and asked if any family member has the same condition. But we were not sure if we have the condition or not after our earlier general examination. The doctor diagnosed him with a sore throat, but he had never had such a fever for so long before? We are very worried about this genetic anemic disease. We would like to have a test for him, but currently he is sick so can he be tested or not? What tests are need? How long do we have to wait for the results? We look forward to hearing from you soon. Your sincerely.

Answer: He has currently been diagnosed with sore throat so please continue the treatment until completely recovered. When your child is better, you can take him to Blood Transfusion-Hematology Hospital to have a diagnostic test to determine if he has genetic anemia. Initial testing is quite simple, requiring only blood cell count, serum ferritin, hemoglobin electrophoresis. The results are available in about 3 working days.

Enquirer: T.T.T.N

Consultant: MD (Grade II specialist) Nguyen Thi Hong Hoa

Thalassemia consultation

Question: Dear Doctor, Please help advise me what should be a proper diet when the patient is diagnosed with mild thalassemia, with the symptoms of dizziness, fatigue, pale blue skin during menstrual period? Should the patient eat blood producing foods such as beef, animal liver, spinach, amaranth ?! Should the patient drink regular tea, or be restricted on tea? We look forward to receiving the reply and advice from you. Thank you. Best regards.

Answer: If a diagnosis of mild thalassemi has been made, the patient usually has mild anemic symptoms and does not require any special medical interventions. However, dizziness, tiredness, pale green skin when menstruating can possibly be signs of blood loss through menstruation, which may aggravate anemia. If having iron deficiency, the iron-rich diet such as beef, animal liver, spinach, amaranth, etc, is needed. Tea contains tannin which limits the absorption of iron from food. The patient should be examined and tested with serum iron, serum ferritin to see if iron deficiency accompanied. From there, you can be advised with a proper diet.

BTH CUSTOMER SERVICE

"Customer Care" is the phrase that we could only hear when using shopping services a few years ago. Customer care plays a huge role in determining whether customers return to the store one more time to continue using your product or service. A well-looked after customer means that a customer is completely satisfied with the advice, product, service delivery, and continues to receive the attention of the store even if they have not had the need to purchase anything else. At our hospital, customers are not just only health care consumers but also people in need of support in care, consultation, emotional support, medical procedures as well as the need to be heard and empathized for their illnesses

Hình 1: Customer guidance the registration area



Customer Service Division of Blood Transfusion Hematology Hospital was established in June 2014 with the aim to improve healthcare service quality. The question was raised by the staff when the Division was first established: What do we have to do to take good care of our customers? And how to provide customer service timely when the customers come to the hospital? Understanding the psychology and the difficulties that patients often encounter, customer care staff

always try to accompany our customers while they are in hospital.

Listening, answering enquiries, providing guidance and timely feedbacks to clients are the basic tasks that a customer care staff performs every day (Picture 1).

Besides, the provision of mental health care for patients, the timely recognition and support for patients enduring hardship, the implementation of patient education and communication programs are also very important tasks (Picture 2).

Hình 2: Patient education and communication programs



Previously, when in need of support, patients and their carers could only ask nurses, doctors, but now they have a trustful, familiar agent always supporting them that is Customer care Division. Our professionalism and enthusiasm have made us close to our customers. The initial successes are due to the endless efforts of the Board of Directors to increase the quality of the hospital with reasonable, timely and effective policies

Customers are the lifeblood of any store, any business. Consequently, customer care is one of the vital elements and requires a lot of effort and financial investment. Customer care is not just about selling products or services to customers, it requires your hospital to create absolute satisfaction for customers about your products and services/.

Phan Vu Anh



BTH LIGHTENS UP YOUR TRUST

On the first days of the new year, at Blood Transfusion and Hematology Hospital (BTH), we have welcomed a lot of charitable groups from charitable organizations to visit and present gifts to patients enduring hardship. Accompanying the sick, Department of Social Work (CTXH) also has had a number of additional support programs for these special patients

"BTH car ride with love" program run by the Youth Union and Department of Social Work in the occasion of "Tet" Lunar New Year



2018 helped many patients have the opportunity to reunite their family in the New Year. "Tet" is very close to us, but for those patients in

difficult situations, it is too far away when they can not even afford some money for treatment. Therefore, we decided to start the program, although limited in number of rides but the love from human to human, from heart to heart spirit was spread not only in the youth union members, hospital staff but also in many charitable individuals and organisations. Thanks to that, after the program, there were more and more charity groups coming to support patients

with car tickets to reunite with their family during "Tet".

In addition to the patients who were reunited with their families during the Lunar New Year, about half of the patients had to stay in the hospital during Tet, sharing with those difficult patients, many charity groups visited and presented gifts to those patients. On the morning of February 20, the hospital was happy to welcome the delegation of charitable organization representatives led by Journalist Nguyen Quang Thong, Vice Chairman of the Youth Union of Vietnam, Chief Editor of Thanh Nien News visiting and giving gifts to children in HHTE1 and HHTE2 departments. The delegation presented gifts to 30 patients, each containing a Nestlé milk powder box (valued at VND 2.4 million per box) and VND 4 million in cash. Mr. Ho Van Anh, Representative of Thai Tuan Group, said: "The children are too young but they have already suffered from severe illnesses. Many families are



in difficult circumstances. Our little gifts and companionship to those in the new year are for the

hope to help the children and parents alleviating their pain and suffering. "[https://thanhnien.vn/doi-song/mangniem-vui-den-voi-benh-nhi-tre-khuyet-tat-dip-tet-934770.html]]

On February 27, the Department of Social Work organized the "Scholarship granting and Supportive grant for Treatment Ceremony in the Lighting the Confidence Program of Lieutenant General Le Manh's family." Having accompanied with the hospital for nearly a year, Lieutenant General Le Manh's family has provided many supportive grants to help those in difficult circumstances receive treatment opportunities and more to that, opening a brighter future for for many children. The

ceremony took place in a solemn, joyful and emotional atmosphere with the presence of the representatives of the hospital's directorate, Lieutenant General Le Manh's family and the patients receiving the support. The family has donated 11 scholarships, 5 supportive treatment grants and Lunar New Year lucky money for pediatric patients with good academic achievements. With these noble deeds, we hope that Lieutenant General Le Manh's family in particular and other charities in general will always accompany the hospital, to help more disadvantaged people have the opportunity to receive proper treatments.

Dr. Nguyen Ngoc Sang



FAMILY RECIPES

RECIPE 1:

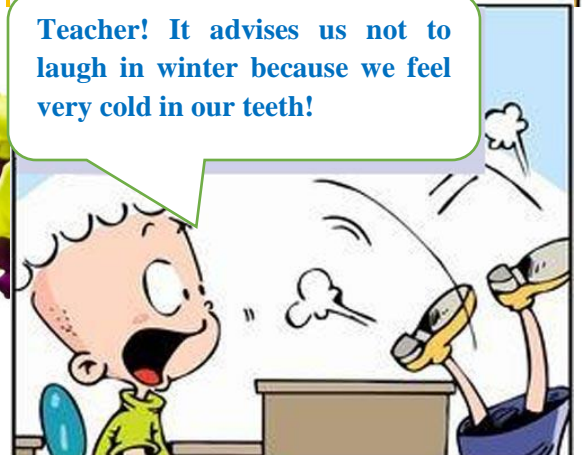
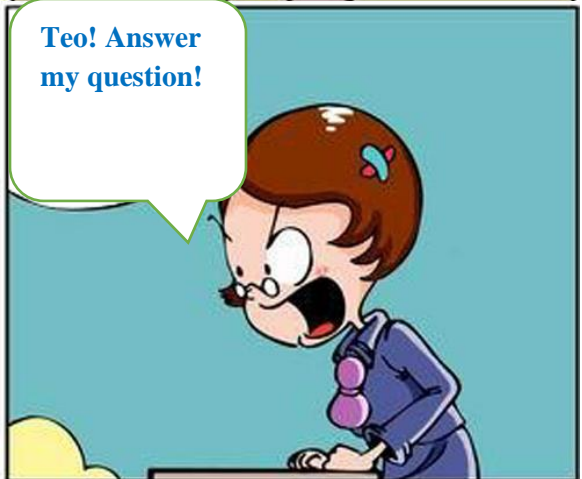
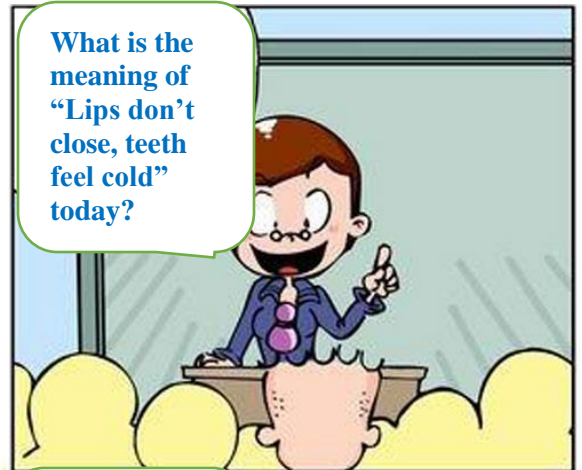


- Pork in mustard leaf with sweet and sour sauce
- Lemongrass steamed crab
- Cucumber salad
- Fried duck egg
- Pork ear in five spice seasoning

RECIPE 2:

- Fried prawn balls in sweet corns
- Tofu in tomato sauce
- Meat balls with vegetables soup
- Fried pork in five spice seasoning
- Steamed loofah





HBTHA

HO CHI MINH CITY BLOOD TRANSFUSION
AND HEMATOLOGY ASSOCIATION

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