
BSTTW COMMUNITY NEWS

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BSTTW REBUILDING LIVES

Bishop Peter Nguyen Van Nho World Wide Burned Children's Fund

By: Michael Appleman, CEO

BSTTW has changed the name of our burned children's fund to honor a very special individual that has been helping BSTTW and all types of people around the world.

Bishop Peter Nguyen Van Nho has been helping BSTTW for over one year before his death in May 2003. Michael Appleman, President/CEO & Executive Director and Nguyen Thi Dieu Tran, Vice President & Director Viet Nam, met with Bishop Peter Nho several times during BSTTW's trips to Viet Nam in 2002.

In April 2002 Bishop Peter Nho met me for the first time. Bishop Peter Nho learned a lot about BSTTW and wanted to take part in helping the burn survivor community and the growth of BSTTW. Bishop Peter Nho understood the need people have when they suffer a traumatic injury. During the Viet Nam War, Bishop Peter Nho was helping all individuals in South Viet Nam. He kept the belief in God and continued his studies to better himself and in return help the Catholic Community and all people from around the world.

Bishop Peter Nho, Dieu Tran and I prayed for God's help to build BSTTW with guidance, knowledge, strength and funding needed to continue our work with the burn survivor community.

Each time I returned to the United States from Viet Nam, I found more help and information needed to strengthen BSTTW and increase the help to the burn survivor community world wide.



After the BSTTW Board of Directors heard of Bishop Peter Nho's death, we met and voted to honor Bishop Peter Nguyen Van Nho by changing the name of the BSTTW burned children's fund.

All of us need to work together and help the current and future burned children in the USA, Viet Nam and all parts of the world. Burn survivors and family members are an important part of your community and the world. Rebuilding a burned child's life is an important part of the world's future.

A FAMILY AROUND THE

BSTTW continues the efforts needed to do God's work and reach the prayers and dreams of Bishop Peter Nguyen Van Nho.

Please take part and help BSTTW rebuild the lives of the current and future burned children by donating to the Bishop Peter Nguyen Van Nho World Wide Burned Children's Fund. All donations are tax deductible on your United States tax return.

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NUTRITION THERAPY AND BURNS: LET'S BEGIN AT THE BEGINNING...

By Paula K Burke, RD,LD

It is my great privilege to start a series of articles for Burn Survivors Throughout The World, Inc.. It seems that as I begin this series, a good place to start would be to share with you some of the information that is used by the Registered Dietitian (R.D.) to assess the nutritional status of an individual who presents to the hospital with a severe burn injury. The dietitian uses the nutritional assessment to develop an individualized nutrition care plan. The nutrition care plan includes recommendations for medical nutrition therapy that becomes a part of the overall therapy plan of the health care team led by the physician in charge.

Medical Nutrition Therapy is considered a “supportive” measure. A dietitian is trained to understand that nutrition is the foundation of both the *structure* and the *function* of every cell in the human body. If optimal nutrition promotes optimal function, then the opposite is also true: sub optimal nutrition will not promote optimal function. The definition of ‘optimal’ can vary dramatically by the situation in which the body finds itself. When the body is in danger, as it is when it is threatened by severe illness or injury with severe burns, nutrition plays a critical role.

THE NUTRITION ASSESSMENT

The nutritional requirements of a person can be very different and depends on the whole person and their situation. The dietitian uses the ABC approach to assess the nutritional status of a person.

A = Anthropometric Measures

Anthropometrics include Height and Weight. Weight is generally considered in proportion to Height, with an Ideal Body Weight (IBW) being used as a frame of reference. The IBW is based on age, gender, and

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frame size. The estimated daily calorie and protein needs are calculated based on the person’s weight.

It is important to remember that the skin is one of the most important organs in the body when it comes to preventing dehydration. When a large portion of a body’s skin surface is destroyed by burns, it can be very difficult to keep enough fluid in the body and to keep it working properly. Ideally, the dietitian will know the usual weight of the person *before* the burn injury. It is this weight that the dietitian prefers to use because it gives a better idea of whether the person was of normal weight, underweight or overweight before the burn injury. Although height remains the same, weight changes, and can change dramatically when a person has been severely burned. The weight of a person can change up or down by 30 pounds or more because of the amount of body fluid a person has lost or gained. This is because 1 liter of fluid weighs about 2.2 lbs.

This is important to know when calculating calorie, protein and fluid needs. If the usual body weight is not known, the ‘dry’ body weight that is obtained on admission to the hospital will be used for calculations as compared to what is known as the ‘wet’ weight that occurs during or after fluid resuscitation. A dietitian closely watches the weight of the patient throughout the hospital stay.

B = Biochemical Measures

Blood work is done on all people hospitalized with severe burn injury. The blood that is drawn from a patient is sent to the laboratory where the blood levels of many substances can be measured. What substances are measured depends on what the physician and other members of the health care team want to see. This includes ‘electrolytes’ such as sodium, potassium, calcium, and magnesium as well as different blood proteins. The blood levels of these substances are very important in letting the health care team know how the body is responding to the different therapies being provided. These therapies include medical, nutritional and drug therapy.

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C = Clinical Indications

The dietitian also wants to know other important information about the person. This information includes the medical history. The medical history tells the dietitian whether this person was completely healthy before the burn or whether the person has other medical conditions before or since the burn injury. The medical history also lists any medications, vitamins, minerals or other dietary supplements the person may currently be taking or were taking prior to the injury. These facts are very important in helping the dietitian to assess the nutritional status of the patient, develop the medical nutritional therapy care plan and in monitoring the patient's response to therapy.

THE NUTRITION CARE PLAN

The care plan is developed to provide adequate nutrition support via medical nutrition therapy with the following goals:

1. Provide adequate nutrition (calories, protein, fluid, vitamins, and minerals) to meet the nutritional needs of the patient. The goal of optimal nutrition is to meet the body requirements of an individual without underfeeding OR overfeeding the patient. Both underfeeding and overfeeding places an undesirable stress on the body.
2. Minimize the loss of lean body tissue. When the body is in a stress response such as with severe burn injury, the body does not use stored fat tissue to provide energy for the body; instead the body starts to break down muscle tissue for energy when the body is in the stress response. When the body is properly fed, the breakdown of muscle can be slowed down.
3. Prevent weight loss of more than 10% of the usual body weight before the burn injury. Some weight loss is unavoidable, but the goal of medical nutrition therapy

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is to keep this weight loss to a minimum. In a person that weighs 100#, this would mean that when the person came out of the critically ill phase of the burn injury, the person would not weigh less than 90lbs.

4. Provide adequate nutrition that will assist wound healing and help prevent infection.

The dietitian develops the care plan to meet these goals by calculating an initial or starting point of estimated nutritional needs for a person. The first step in the plan is to reach the point where the person is actually taking in 100% of the estimated needs. For the first 72-96 hours the person will usually not be able to eat and will be undergoing fluid and electrolyte replacement. The person may need to be fed with an IV or feeding tube early on. Until the patient is discharged from the hospital the dietitian will be monitoring the patient in several ways to be sure that the 4 goals of nutrition support are being met. These include:

1. Daily calculation of the amount of calories and protein the person is taking in via a Calorie Count.
2. Monitoring fluid intake and output daily.
3. Monitoring weights that are measured at least twice a week for changes.
4. Monitoring changes in blood work or 'Labs'.
5. Monitor the progress of wound healing.
6. Monitor for signs and symptoms of infection.

The dietitian will recommend to the physician any changes in medical nutrition therapy that would be appropriate and desirable for the patient.

We have now come to the end of the beginning, which is the period of time immediately after the severe burn injury when the patient is in the critically ill stress response phase. This is the period of time where the person may be unconscious or sedated to the point where they may be unaware of what is truly happening to them. The nutritional needs of the patient do not go away after this beginning however,

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as you well know. The ability to take in enough calories and protein can be very challenging. Next time we will discuss ways and means to achieve this. This is when the person is actually eating real food on their own again, whether in the hospital or at home!

Burn Surgery

By: Dr. Mahmoud El-Oteify, M.D.

Burned patient's, with severe burns, need the care of a qualified burn surgeon, due to their medical needs from the burns. The patient usually needs the surgeons care till the end of the full course the treatment and even after that for many years later.

The burn surgeon should know how to do escharotomy for cases of circumferential deep burns of the chest or limbs. Escharotomy helps to prevent problems due to inadequate chest expansion during inspiration or peripheral ischemia in the limbs. This should be done immediately after admission to the burn unit and before the edema occurs. Edema can jeopardize the blood supply to the periphery of the areas that were burned.

The word deep burn means full thickness skin burn, which is also called 3rd degree burns. A superficial burn or partial thickness skin burn, 2nd degree burns, usually will not need escharotomy because the elastic fibers which are already present naturally in the depth of the skin is not burned. It will permit skin expansion during inspiration or due to edema. A partial thickness burn usually heals within 3 weeks & does not need any grafting procedures.

Immediate Excision and Grafting:

Burn Units offers the intensive care and patient monitoring needed to help them recover. This type of care allows the burn surgeon to perform escharectomy and immediate skin grafting within a 5 to 7 days after the accident. The burn victim becomes haemodynamically stable at this time. This usually shortens the hospital stay and prevents the toxemia, which can occur due to the toxic absorption

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of the dead proteins and the infection, which usually present in the sub-eschar plane.

Spontaneous Separation of Eschar & Delayed Grafting:

In the low facilities burn units the surgeon generally hesitates to perform the excision because it needs a lot of blood transfusion and good patient monitoring. The alternative is waiting 2-3 weeks for the spontaneous separation of the eschar. At that time, the raw area of the skin is ready for grafting.

In order to perform skin graft on a burned area of the body, the surgeon usually takes the a superficial layer of the skin from a non burned area. It is important to have a very thin sheet because *the thinner the graft the better the take by the body*. The deeper skin layers, the donor area of the body, usually regenerates faster, approximately 10 days after the surgery, if the graft which was harvested is very thin.

The ideal skin graft in this case is the auto-graft and the classical donor site is the thigh. We may put the skin as it is “sheet graft” or we mesh it to do multiple fenestrations with the special mesher machine. The main benefit of this meshing is the expansion of the skin in order to cover a bigger area than the donor site. This type of work is called a meshed graft. A Meshed graft produces a mosaic appearance after healing. If the patient's general condition does not permit auto-grafting or if there is limited donor sites, the alternative is to cover the wound by skin homo graft or any type of skin substitute.

The auto-grafting procedure, in this stage, is considered as **primary burn surgery** prior to the complete healing of the burn wound.

Secondary Burn Surgery

A few months after the healing, the burn survivor may notice skin hypertrophy (thickening) especially in the areas which healed spontaneously without grafting. If this occurs 2-3 weeks after the healing, it

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means that the burn was a deep 2nd degree burn. We may notice also some contractures either linear or broad anywhere in the body. You may also find leukoderma, alopecia scalp or any other scarring or abnormal pigmentation. All of the above can be corrected surgically in the future. This type of surgery is called secondary burn surgery. Secondary burn surgery is usually postponed for at least 6 months after healing in order to allow the burn scar to be supple. This will make it less vascular and easier to manipulate.

The exception for this policy is the ectropion of the eyelids. This is the inability to close the eye due to the cornea. It can be affected if left exposed (exposure keratitis). In this case urgent surgery is usually recommended.

When a young female is burned, we usually postpone any surgery to the female breast until puberty. If this type of surgery is performed we may lose everything in that part of the body. Due to that, we usually wait until after the full development of the female body. If medically it would be harmful to the patient to postpone the surgery, we will perform the necessary procedures.

These types of contractures and deformities are very common in Upper Egypt due to the ignorance, negligence and poor resources. A qualified burn surgeon is present in very few hospitals in Upper Egypt. These type of surgeons are needed for immediate skin grafting on burns. The surgery needs to be performed within the 1st month and before contractures occur. The majority of hospitals leave the patient without any grafting procedures until severe contractures develop. These patients usually arrive at Assiut University Hospital for secondary burn surgery.

Techniques In Secondary Burn Surgery:

Basically in any contracture we must remove the whole fibrous tissue and cover the defect with a skin graft. The graft in this area is usually partial thickness in order to permit spontaneous healing of the donor site. The graft is relatively thicker than the

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graft used for Post Burn Raw Area (PBRA). The surgically denuded surface carry better chances of accepting the graft. Usually *the thicker the graft, the better is the color matching and the less the contracture later on*. In some cases especially in the face we prefer to put full thickness skin grafts. This type of skin graft usually gives a better appearance post surgery. We can harvest the skin from the abdomen or the groin and close the defect by a skin edge approximation because the skin is redundant and permit.

Skin Flaps

In some areas of the body release and skin graft procedures are not the best type of surgery to be used. This is due to either darker pigmentation or re-contracture especially in the neck or over the joints e.g.: in front of the elbow and the back of the knee. Because of that, the skin flap is the ideal choice. It will never contract and keep the same color match.

The skin flap is an area of the skin with the subcutaneous tissue to protect its blood supply. It is to be moved to the skin defect either locally or from a distance. Of course it is not always available, but with experience the burn surgeon can choose what is the best for every situation.

Over the last 30 years I corrected many thousands of cases of Post Burn Contracture (PBC) all over the body without exceptions. I have special interest PBC neck and PB in a deformed hand. This interested is because occur frequent in my area.

I have performed lectures and special publications during my career that you might be interested in looking at.

- My 1st publication was in 1981 in the British journal of plastic surgery. It is titled "Versatile Method For Release of Post Burn Scar Contracture"
- I presented a lecture at the ISBI meeting in Paris, France in 1994 on Post Burn and hand deformities.

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- I presented a preliminary report in Yokohama, Japan in 1995 and a second presentation in San Francisco, California in 1999 about the special flap release for Post Burn band contracture.

Matches and Fire Through The Eyes of A Child

By: Delores Gempel Lekowski

Fires set by children is a problem that isn't going away, in fact, it is increasing at alarming rates. So much so, programs have been put in place all over the world to help understand and remedy this growing and dangerous practice.

Statistics have proven if the child isn't helped early on, they will go on to setting bigger fires or end up in the Juvenile Detention System. Granted, not all children who set fires continue on to bigger things. Younger children set fires because of curiosity and they view fire as something that doesn't cause pain or damage. Older children use fire as a way to achieve power and acceptance. These are the children who we desperately need to help. We cannot ignore these children's cry for help.

I would like to focus on the younger, first time, fire setters and what may have played a role in why they started a fire or played with matches. It is important for us to visualize fire through the eyes of a child. Children view fire and matches as a nice thing, friendly fire, if you will. In their world they see matches being used to start friendly fires all the time. These fires bring nice things and comfort into their world. Their mothers light a candle with a match and a fire is started bringing a nice scent into the room. Their father uses a match to light a fireplace on a cold winter's night, and the room takes on a warm cozy feeling with the sounds of wood crackling. Maybe a violent storm, filled with thunder and lightning knocks out the electrical power, matches and fire come to the rescue and a candle is lit and the room is illuminated with light. What about those wonderful camping trips and the bon fire Dad makes so the family can roast marshmallows and sing songs

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while they enjoy the warmth of the fire on a crisp night. Let's not forget those birthday cakes and the lit candles we make our yearly wishes on.

Fire is a very powerful element and should never be taken lightly, adults know this, children do not, why would they, they see fire as something that is warm and cozy, something that makes them feel safe and fuzzy all over.

While fire and matches do bring us good things, it is imperative that adults make it perfectly clear to children how destructive and dangerous fire can be. It is also very important that children are made aware of how quickly a fire can get out of control, how one match can burn a whole house down, how one match can burn a child or adult almost instantly. We tend to not want to frighten our children with the realities of fire, frightening them is the lesser of the two evils.

Talk to your children. Help them understand the realities of fire, the real realities, because they just don't know, how would they?

Tai Chi and Your Recovery

By: Matthew Rockford, BA

Tai Chi was originally practiced as a system of self defense which incorporated the Taoist philosophy of Yin and Yang (harmony). This unique art has over the years evolved to become one of the most popular forms of holistic exercise systems in the world and is now used by many health professionals to help patients restore their health and vitality. Because the movements are all done in a slow, relaxed manner at the students pace it is especially good for anyone with limited mobility or in the process of rebuilding their lives. There is no pressure with Tai Chi and no set targets other than those you set yourself, so a program can be designed to suit you, depending on your personal desires and range of mobility.

Since the beginning of time, human beings have been practicing exercises and forms of meditation designed to improve well-being and restore health. Since the 1700's, the Chinese have been practicing an art known as "Tai Chi Chuan". Tai Chi

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Chuan is characterized by its soft, fluid movements and many relaxing effects. It has since come to be known as a form of moving meditation. Nowadays Tai Chi is used the world over to help in the fight against stress (in all its forms) and the improvement of inner and outer health. By "inner health" I am referring to the mind and by "outer health" the body and it is on these two axes that Tai Chi can bring real and lasting benefit to those who have recovered from the worst affects of burns. The beauty of Tai Chi as a system of rejuvenation is primarily its flexibility and adaptability to suit all ranges of mobility.

In China the philosophy of recovery includes using movement based therapies to help the body heal itself (along with acupuncture and herbal medicine). This placement of value upon keeping the individual's body and vital energy moving in relaxing yet stimulating ways is becoming more accepted in the West. It is no surprise that Tai Chi is being used in hospitals, community centers and colleges on a more regular basis to help people from all backgrounds improve their health in a more interactive way. Tai Chi offers the individual a flexible program which they can adapt for themselves which offers both physical and mental benefits

The movements of Tai Chi are all done slowly to aid in the relaxation of both body and mind. The most noticeable affect is that of mental calm as the mind is focused in the present moment free from distraction and worry. The gentle movements meanwhile help to promote blood flow throughout the body and lymphatic stimulation (thus boosting the immune system). The qualities of improved blood and lymph flow can aid in the recovery from many conditions and may help in tissue healing as well as a general feeling of well being and warmth within the body.

The movements may also improve the oxygenation of the blood, as the posture adopted in Tai Chi improves lung capacity and efficiency. This in turn is good for our brain power which will benefit anyone! Tai Chi may also help with improving elasticity of the skin due to the tissue being very gently stretched (but never forced) during movement. This therapeutic movement will also help raise the mobility in the

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joints (fingers, toes etc) which will be especially useful for burn recovery.

Socially Tai Chi classes are great for meeting others with a common interest in well being and in my 12 years of experience are usually attended by non-judgmental people who are, dare I say it, really nice people. As I imagine, recovering from serious burns, may affect an individual's social level to a higher degree, due to all our social stigma on how we look, then a class which provides some support and space with the idea of "just to be yourself". Just to be yourself, may be useful in the recovery of confidence and self esteem. The confidence gained from practicing and perfecting the movements has also, in my experience, both as student and teacher, helped many people gain a new type of confidence in their bodies (with new levels of kinesthetic ability) and boosted self esteem and mental well being.

I wish you well!

Matthew Rochford is the director of The Devon School Of Tai Chi in the United Kingdom. Mr. Rochford is also the author of the book "Total Tai Chi".

Moving Forward

By: Michael Appleman

**After the initial trauma of the burn
Life makes a very hard turn
There is so much that we all must learn**

**Many todays seem so bad
Many moments appear to be sad
Dear God tomorrow will I be glad?**

**Troubles never seem to go away
That feeling is each and every day
Will all of me stay?**

**Each step that I take
The pain is not fake
Take me over to see the lake**

**Moving forward is were I will go
I do want to say no
One day my life all I will show**

Michael Appleman

BSTTW CONTACT INFORMATION

Emergency Contact

We have an Emergency Email Form on the Internet. Go to: www.burnsurvivorsttw.org/emergemail.html

You, your family and friends can also reach us by phone at 941-364-8457 or 1-800-503-8058. If we are not in the office or it is after hours, leave a message in the emergency mailbox. A support team member will respond to you within 24 hours. **BSTTW** has at least one individual on call 24 hours day/7 days a week.

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DONATIONS

As a 501 (c)(3) Non Profit Organization, all donations, big or small are tax deductible to the extent of the law. **BSTTW** accepts donations for our general fund, the “Bishop Peter Nguyen Van Nho World Wide Burned Children’s Fund”, Asian, Middle East & USA Burn Children Camp funds, BSTTW Healing Weekend Fund and the World Burn Congress 2003 fund. Donations from Companies, Churches, Organizations, Communities and individuals will help **BSTTW** to do the work that is needed for all Burn Survivors, family members and the public around the world. Remember your donations can be money, clothes, a used bicycle etc.. All will help burn survivors and their family. Many families loose their homes and property. Please personally think about and talk to your family and friends about donating to **BSTTW**. Federal Tax ID #94-3403785

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Mail your donations to:

Burn Survivors Throughout The World, Inc.
650 N Beneva Road #305
Sarasota, Florida 34232

To Donate on line go to:

www.burnsurvivorsttw.org/donations.html

If you have any questions call us at 941-364-8457, 800-503-8058 or email **BSTTW** at:
donations@burnsurvivorsttw.org

Volunteering your time with **BSTTW**

We always can use your help. There are many children, adults and families around the world that need support and other help. You can take part in rebuilding the lives and helping people reenter their community. Go to www.burnsurvivorsttw.org/volunteer.html in order to learn more about volunteering with **BSTTW**. Feel free to contact **BSTTW** by telephone at 941-364-8457, 800-503-8058 or email us at volunteers@burnsurvivorsttw.org

Purchases

BSTTW has an online store were you can purchase Skin Care Products, Books and Video Tapes. Got to: www.burnsurvivorsttw.org/sales.html

You can also purchase Skin Care Products by telephone at 800-503-8058.

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