



Protect your ears: Limit iPod use

REUTERS, New York

The ever-popular earbuds used with many iPods and other MP3 players may be more stylish than the bigger and bulkier earmuff-type headphones, but they may also be more damaging to one's hearing, according to a Northwestern professor.

"No one really knows for sure" the levels at which iPod users listen to music, but "what we do know is that young people like their music loud and seldom worry about any decline in hearing ability," Dean Garstecki, chairman of Northwestern's communication sciences and disorders department, told.

The earbuds commonly used by iPod listeners are placed directly into the ear and can boost the audio signal by as many as nine decibels -- comparable to the difference in sound intensity between an alarm clock and a lawn mower, Garstecki said. Yet, the earbuds do not always fit snugly in the ear, but often allow background noise to seep in, which causes listeners to crank up the volume.

In turning up the volume to drown out background noise, however, people "don't realise they may be causing some damage" to their hearing, Garstecki said.

This danger is not confined to MP3 users, such as iPod owners. Earbuds are also used with compact disc players and Walkmans. Audiologists have cautioned about the potential risk of hearing loss associated with such devices since the 1980s. The longer battery life and the greater music storage capacity of MP3 players, in comparison to Walkmans and compact discs, however, encourage longer periods of uninterrupted music listening.

"It's the combination of high intensity and long duration that creates the unique problem with the iPod," Garstecki said.

Various researchers have reported an increased risk of

hearing loss associated with headphone use in the general population. An MTV survey revealed that most teens and young adults do not think hearing loss from loud music is a big problem, even though over half of those surveyed said they experienced ringing in their ears after concerts. When told that the loud music may lead to lifelong hearing loss, however, most of the survey participants said they would consider protective measures in the future.

Eliminating iPod earbuds in favor of larger earmuff-style headphones as one of those protective measures may be an unattractive option for many style-conscious music lovers. Instead, Garstecki recommends adherence to the 60 percent/30 minute rule. Listeners should set their iPods and other MP3 players to sound levels that are no more than 60 percent of the maximum volume -- i.e. just over halfway between "off" and "maximum" volume -- and use their earbuds for no more than 30 minutes a day.

Those who use muff-style headphones at 60 percent volume can increase the duration to an hour a day, and those who listen at volumes significantly lower than 60 percent of the maximum can use their music players for many more hours. Also, newer, more snug-fitting earbuds are "likely to be safer" if they prevent users from turning up the volume to eliminate background noise, Garstecki said.

Noise-canceling headphones are another option for those who desire to listen to music for an extended period of time. These devices, while a bit more costly and more visible than earbuds, partially or fully eliminate background noise so that users do not have to crank up the volume of their music for that purpose.

Botox injections help with voice problem

Most people think of Botox injections as a way to achieve smoother skin, but new research indicates that this treatment can also help with a voice problem called adductory spasmodic dysphonia (AdSD). Also, the benefits seem to persist even with repeated injections.

AdSD results from spasms in the muscles that control the vocal cords. The strained or pressed voice that typifies the disease can have a dramatic effect on patients' emotional, functional, and social well-being. Botox works by relaxing the vocal cord muscles.

"We now have good evidence that this treatment does have a significant and repeatable beneficial effect" on quality of life, senior author Dr. Norman D. Hogikyan, from the University of Michigan at Ann Arbor, said.

The findings are based on a study of 42 AdSD patients who were given Botox injections. They were given repeat injections as needed to control their symptoms. Patients completed symptom and quality-of-life questionnaires

before and after each injection. The number of injections per patient ranged from 1 to 7 and the average time between treatments was 25 weeks. The average time between injection and follow-up questionnaire was 7 weeks.

Quality-of-life scores improved significantly after each Botox injection, the researchers report. Moreover, the magnitude of benefit did not seem to diminish with later injections.

For more than 80 percent of the treatments, the patients reported an improvement in their voice rating. In contrast, just 4 percent of the treatments were associated with a worsening in voice rating.

"This study demonstrates the long-term effectiveness of Botox for treating patients with AdSD," the authors conclude.

SOURCE: Archives of Otolaryngology: Head and Neck Surgery

Announcement

Star Health will start a new column "Your Doctor". This is to help our readers to know more about their health related matters. Please send your queries through e-mail (starhealth@thedailystar.net). Experienced doctors will answer. On coming issue "Your Doctor" will respond to problems on Medicine.

CARDIOPULMONARY RESUSCITATION

A lifesaving technique

TAREQ SALAHUDDIN

Cardiopulmonary resuscitation (CPR) is a lifesaving technique useful in many emergencies, including heart attack or near drowning, in which someone's breathing or heartbeat has stopped. CPR involves a combination of mouth-to-mouth rescue breathing and chest compression that keeps oxygenated blood flowing to the brain and other vital organs until more definitive medical treatment can restore a normal heart rhythm.

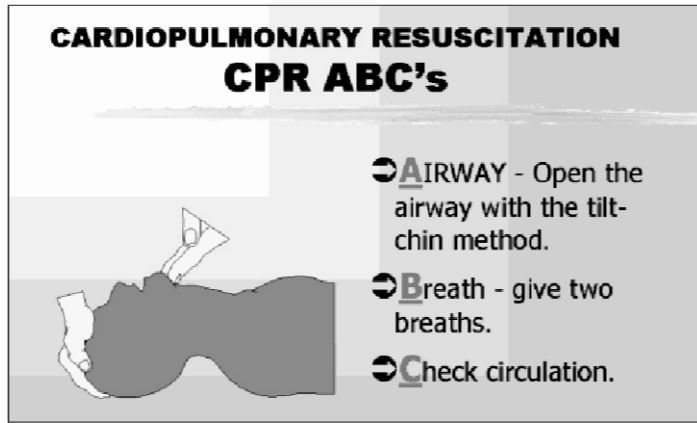
When the heart stops, the absence of oxygenated blood can cause irreparable brain damage in only a few minutes. Death will occur within 8 to 10 minutes. Time is critical when you are helping an unconscious person who is not breathing.

Before you begin assess the situation before starting CPR:

- Is the person conscious or unconscious?
- If the person appears unconscious, tap or shake his or her shoulder and ask loudly, "Are you OK?"
- If the person does not respond, call an emergency number, or have someone else do it. But if you are alone and the victim is an infant or a child age 1 to 8 who needs CPR, perform two minutes of CPR before calling for help.

Remember the ABCs - Airway, Breathing and Circulation.
Airway: Clear the airway

1. Put the person on his or her back on a firm surface.
2. Kneel next to the person's neck and shoulders.
3. Open the person's airway using the head tilt-chin lift. Put your palm on the person's forehead and gently push down. Then with the other hand, gently lift the chin forward to open the airway.
4. Check for normal breathing, taking no more than 10 seconds:



Look for chest motion, listen for breath sounds, and feel for the person's breath on your cheek and ear. Do not consider gasping to be normal breathing. If the person is not breathing normally or you are not sure, begin mouth-to-mouth breathing.

Breathing: Breathe for the person
Rescue breathing can be mouth-

to-mouth breathing or mouth-to-nose breathing if the mouth is seriously injured or cannot be opened.

1. With the airway open (using the head tilt-chin lift), pinch the nostrils shut for mouth-to-mouth breathing and cover the person's mouth with yours, making a seal.

2. Prepare to give two rescue breaths. Give the first rescue breath lasting one second and watch to see if the chest rises. If it does rise, give the second breath. If the chest does not rise, repeat the head tilt-chin lift and then give the second breath.
3. Begin chest compressions.

Circulation: Restore blood circulation

1. Place the heel of one hand over the center of the person's chest, between the nipples. Place your other hand on top of the first hand. Keep your elbows straight and position your shoulders directly above your hands.
2. Use your upper body weight (not just your arms) as you push straight down on (compress) the chest 1 1/2 to 2 inches. Push hard and push fast give two compressions per second, or about 100 compressions per minute.
3. After 30 compressions, tilt the head back and lift the chin up

to open the airway. Prepare to give two rescue breaths. Pinch the nose shut and breathe into the mouth for one second. If the chest rises, give a second rescue breath. If the chest does not rise, repeat the head tilt-chin lift and then give the second rescue breath. That is one cycle. If someone else is available, ask that person to give two breaths after you do 30 compressions.

4. If the person has not begun moving after five cycles (about two minutes) and an automated external defibrillator (AED) is available, open the kit and follow the prompts. A defibrillator is an apparatus used to apply an electric impulse to the heart to make it beat regularly. Obviously it needs experience and skillful training. Do not use an AED for infants younger than age 1.

5. Continue CPR until there are signs of movement or until emergency medical personnel take over.

First successful paediatric renal transplant performed in the country

DR ABDULLAH SHAHRIAR

Even two months back, Bishanath Chandra Sarkar could not understand what to do. The poor peasant spent everything for his beloved eldest son who had been suffering from end stage kidney disease. The twelve years old boy, Bikas along with his family passed the days with great agony. The doctors told his father that they had nothing to do with conservative therapy as both of his son's kidneys were damaged. In this case, transplantation was the only treatment option that the doctors could offer.

But the situation was quite tough for the poor family. Because it costs taka one to two lakh for a kidney transplantation. Moreover Bikash needed only tissue matched kidney for transplantation. According to jurisdiction, they had no way to collect donor kidney other than their family members. Again with utmost despair Bikash was passing his days.

But due to the initiative of doctors at BSMMU and villagers (irrespective of religion) of Uzirpur of Rajshahi district - Bikash could find his way. Thanks to God, with his uncle's kidney Bikash went for transplantation on January 31, 2006 and that was the history. Urologist Professor Abdus Salam and Dr Sajid Hasan made history by performing paediatric kidney transplantation in our country.

Even after a successful operation the doctors could not give full assurance to his family about



Doctors examining Bikas before kidney transplant.

that outcome of the operation. Graft rejection, Post operative infections and other complications were enough to doom the success of much transplantation surgery.

For the first few days Bikash did not manifest any improvement. His blood pressure was still beyond higher limit and the serum creatinine level was also in higher range.

But nothing could resist the pounding impulse of little Bikash. Professor Moazzam Hossain, Dean of Medical Faculty and also the Head of the Department of Paediatric Nephrology after his long recollection told us "It was quite amazing that how we had done it. It was rather a tough game. Bikash before operation not only needed money but also soundness of health". But two months back when the doctors received this patient, they were totally disappointed. Bikash before getting into Professor Moazzam's supervision had been treated wrongly at a hospi-

tal in Valor, Chennai of India. He had to go for immediate dialysis for his survival into that hospital. "In fact", Professor Golam Moinuddin - another renowned Paediatric Nephrologist of BSMMU added.

In our country there are few options to treat the paediatric patients of chronic renal failure. 22 bedded Paediatric Nephrology units are not still fully equipped to treat such patients. There is only one haemodialysis machine to treat two patients at a time. Where as the machine costs only about 10-12 lakh Tk.

Urinary tract infections, renal infections, skin diseases, tonsillitis, high blood pressure, drugs, diarrhoeal disease etc. are prime sources for permanent kidney damage in children. The transplantation cost in abroad about 10-12 lakh Tk. In addition, there are so many hassles like donor tissue matching, blood donors, long time hospital stay etc. But now you need not go abroad for paediatric renal transplant.

The paediatric nephrologist stressed on being aware of and keeping away from multiple blood transfusions prior to such surgery, which increases the chance of graft rejection. Because of mass awareness, kidney failure due to diarrhoea or dysentery has been declining day by day. So we need health consciousness in every aspect to get rid of such grave illness.

An atypical presentation of malaria Cerebral malaria is not only confined in the hill it can occur at any part of the country.

STAR HEALTH REPORT

Sanjit Barman 20 from village Noyna of Munshigonj district admitted into the intensive care unit (ICU) of Shahabuddin Medical College Hospital with the complains of headache for 7 days, unconsciousness for 3 days and respiratory distress for 2 days. He was referred from Dhaka National Medical College Hospital. Earlier he was admitted in Munshigonj Hospital and Dhaka Medical College Hospital.

As his condition did not improve, he was referred to the ICU of the mentioned hospital for better management and treatment.

After admission into the hospital doctors assessed the deteriorated condition of the patient. He was intubated immediately and through endotracheal tube huge frothy secretion sucked out. Then mechanical ventilation started. His blood film showed presence of ring stage of Plasmodium falciparum parasite. He was diagnosed as a case of cerebral malaria (malaria that attacks the brain) with aspiration pneumonia (form of pneumonia where infected matter is inhaled from the bronchi or oesophagus).

Anti malarial drugs started associated with good antibiotic coverage. Patient's condition



Sanjit Barman with his mother after proper treatment at Shahabuddin Medical College Hospital.

improved, mechanical ventilation stopped within 2 days and the patient's neurological condition improved day by day. Now patient is alright.

Malaria caused by the P. falciparum attacks brain. The condition of the patient deteriorates very quickly unless proper treatment is started in time. In most cases it turns into fatality.

This sort of malaria occurs usually in the hill tracts. In our country cerebral malaria is prevalent

mostly in the CHT areas. But we should keep in mind that it can occur at any part of the country. So prompt clinical assessment with proper investigation is badly necessary. Otherwise, the patient can be misdiagnosed as a case of stroke, paralysis and so on which can lead even to fatality.

The case report is provided by Dr S M A Razzaque, Professor of Microbiology Department of Shahabuddin Medical College, Dhaka.

Know your medicine

SUVAS SINGHO ROY

While sitting in a relative's medical store in small town of Magura in a hot summer day I found a customer asking "why do you give this medicine, it is not for children". The Pharmacist replied "it is what your doctor prescribed". This is not an isolated incident.

Gone are the days when only doctors and pharmacists had the privilege to know about medicine and the patients remained in dark.

Change in social perception and patient's attitude towards their well being forced the situation to make patients as a part of their health decision. Patients are becoming more active in their treatment, rather than being passive recipients of therapy only. Medicine, the most important component of treatment are like double-edged weapons. They are not only very effective but also could be dangerous, even fatal; if used inappropriately.

Access to information is essential for the consumers to play an active role to decide their drug

therapy. Informed patients respond more effectively to the treatment for their adherence to medicine use guidelines. Even the consumers can have choice for other brands (of course with similar activity) based on pricing.

In order to use medicine effectively, wisely and safely a consumer is in need of at least following information about the medicine s/he is going to use.

1. Name of the drug
2. Strength and dose
3. Possible side effects and their management
4. What medicine should not be taken along with this, i.e. drug interactions
5. How long to be taken
6. When should be taken
7. What to do if a dose is missed
8. Whether to avoid certain foods or drinks while taking this medicine
9. Whether there is a need to replace any medicine correctly taking
10. How to store

The consumers can get above information either from their doctors or pharmacists. This is their right

World Health Day 2006: Working together for health



Health workers - the people who provide health care to those who need it - are the heart of health systems. But around the world, the health workforce is in crisis - a crisis to which no country is entirely immune. The results are evident: clinics with no health workers, hospitals that cannot recruit or keep key staff.

The theme for World Health Day on 7 April 2006 is "Working together for health".



WHO PHOTO: REZAUL ISLAM KALLOL

Tipu Sultan, a health assistant in Kumuli village in northern Bangladesh is vaccinating a child.