Star health

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MEDICAL UPDATE

Treatment of vitiligo

DR DELWAR HOSSAIN

Vitiligo is a disorder of pigmentation, characterised by development of white patches over skin and mucosa after birth. It is a benign disease, yet it has a great potential to cause severe psychosocial sufferings of the patients.

There are few therapeutic options to treat it. They include popular layman's therapy, herbal therapy, homeo therapy, allopathic and modern therapy, surgery etc. But none of them are universally effective.

The disease is well managed in the West and the Europe with the help of recommended guidelines. But in our country, its management is in a mess. With an objective to bring its management into line and making a functional guideline, we undertook several clinico-therapeutic studies in the out-patient department of USTC since 1999.

Types of vitiligo

There are five types of vitiligo. Clinically they are distinct. They have different natural courses and prognoses and a tendency to response variably to treatment options. Vitiligo should be diagnosed on the basis of these clinical sub-types, such as focal vitiligo, segmental vitiligo, acrofacial vitiligo, vitiligo vulgaris and vitiligo universalis. It will help in choosing right treatment, motivating the patients and keeping their interest along the right track. But in our country, all patients are labeled as vitiligo.

Treatment

Vitiligo is a chronic disease. Its treatment requires months to years (never ever days to weeks). It is an idiopathic disease and hence there is no specific and targeted treatment for it. Nevertheless, therapeutic armamentarium for vitiligo is rich now. Choosing right option for right patient at right time is the real deal.

Medicinal treatment aimed at stimulation and migration of melanocytes (pigment carrying cells) from nearby reserve pool to white patches. It sounds helping our body to cure its own disease and hence there is least chance of development of new lesions once cured by medicine.

Types and nature of disease, sites involved, presence of white hairs, availability of options, capability of patients, response to previous treatment etc. should be considered duly before choosing any treatment option. Patients must be well motivated for the treatment plan. Here are few comments on commonly used therapeutic options in our country.

Heliotherapy: It is a treatment option where psoralen (paint or oral form) is used in conjunction with natural sunlight. Numerous combination forms are being used at the discretion of dermatologists. Modern version of this treatment is PUVA. It is a very good, cheap, safe and cost-effective option. It is found effective in all types of vitiligo. Unfortunately the way it is used in our country, patients develop severe local and systemic toxicity. They get afraid and are obliged to stop the treatment. It could be a "gold standard" treatment for our country if it is used judiciously by the patients and the physicians alike.

Phototherapy (usually narrow band UVB): Here UVB (310-315 angstrom) is used to stimulate the melanocytes in the white patches and surrounding areas. The therapy is fairly effective for lesions over face, neck, trunk and proximal limbs. But it is not superior to medicinal treatment in terms of efficacy. It has been considered a good option in the field of vitiligo for the last 3-4 decades. Now it is revealed that it has long term risk of causing skin cancers. American national institute of health and World Health Organisation have reviewed and acknowledged its danger and expressed concerns. Patients and physicians should think several times before choosing this option in treating the vitiligo.

Laser: It implies the therapeutic use of collimated and coherent light of a single wave length. It is designed to deliver ablative therapy in the field of surgery, for instance, eye-surgery, general surgery, dermato-surgery, cosmetic-surgery etc.

Few Lasers have stimulatory effect on melanocytes and this character is being exploited in treating vitiligo. Patches over face, scalp, neck, trunk and proximal limbs may respond favorably to it but acral lesions are found non-responsive. However, Laser is not superior to medicinal treatment and definitely not effective in cases which are non-responsive to medicine.

It was observed that some of our leading dermatologists prefer and refer vitiligo patients to laser treatment. Apparently this is not a prudent advice. Patients and treating physicians should be cautious and careful in choosing this option for treating vitiligo.

Magic cure: Miracle may happen in the course of vitiligo. But there is no place for magic cure in the field of vitiligo. Vitiligo is one of the oldest diseases of the human history. But the causes, pathogenesis, specific and targeted treatment of vitiligo are yet to explore. Fascinating advertisements are simply ill-intentional, irresponsible and non-realistic.

Surgical treatment (skin grafts and cell transplants): In this method, harvested melanocytes or functionally active melanocytes in the healthy epidermis or skin are transplanted in the vitiligo patches. It provides only palliative treatment to the white patches and the body's own power to cure its disease is bypassed. Patients may develop new lesions after surgery.

Indeed, it is a very costly treatment. Medical treatment is needed along with the surgical intervention. However, the surgery has an important role and it is a good option only for carefully selected patients. Patients who have their disease inactive and have limited number of lesions over surgically amenable areas are good candidates for surgery. On the other hand patients with acrofacial vitiligo and vitiligo vulgaris, having extensive and widespread lesions (particularly over acral areas) and unstable disease are not good candidates for surgery. But after adequate medical treatment they may be referred to surgery for left behind inactive patches.

I have seen many patients, who have had surgery few years ago and developed new patches. It is really a regrettable and heart-breaking outcome. It could have easily been prevented if the surgeons and patients become careful in pre-surgical decision.

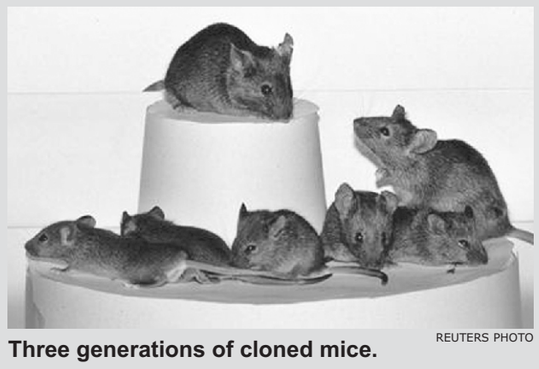
Patients seeking surgical treatment should have their disease inactive first. Usually surgeons consider 6 months to 1 year inactivity sufficient. But this duration of inactivity is meaningless for focal vitiligo and segmental vitiligo because they are inborn stable. On the other hand for acrofacial vitiligo and vitiligo vulgaris, this duration is definitely inadequate. Because, like other chronic diseases, they may remain inactive for several months to few years and again be active. To my experience, 5 years continuous and un-interrupted inactivity should be considered adequate and they must have adequate medical treatment before going for surgery.

Last but not least, surgery can be done within minutes but its final outcome (in terms of color, tone and natural consistency) may require long time (several months to years) to appear.

Conclusion

Vitiligo is a curable disease. Multiple options (both medical and surgical) are available now in the country. Medicinal treatment is cheap, safe and curative. Patients should try this option first. On the other hand, surgery is beneficial only for carefully selected cases. This costly treatment should be used judiciously to ensure its outcome.

The writer is an Associate Professor and Head, Department of Dermatology and Venereology of USTC, Foy's lake, Pahartoli, Chittagong.



Three generations of cloned mice. REUTERS PHOTO

Blind mice see after retina cell transplants

REUTERS, *London*

British and American scientists have restored vision in blind mice by transplanting light-sensitive cells into their eyes in a breakthrough that could lead to new treatments of human eye diseases.

The mice suffered from eye damage called photoreceptor loss which occurs in macular degeneration (eye disorder in elderly patients, where fluid leaks into the retina and destroys cones and rods, reducing central vision), the leading cause of sight loss in the elderly, and other eye disorders.

Instead of using stem cells, which could form into any cell type, the scientists transplanted cells that had reached a later stage of development toward becoming photoreceptor cells.

"We have shown for the first time that it is possible to transplant photoreceptors," said Dr Robert MacLaren, a scientist and eye surgeon at Moorfields Eye Hospital in London.

"These cells are lost in some of the more common causes of blindness" he added.

The scientists believe further research could lead to the first human retinal cell transplants for people with blinding diseases within a decade.

Photoreceptors are specialised light sensitive cells that line the back of the eye and are essential for sight. In eye diseases such as macular degeneration, the cells are destroyed.

Previous studies that had used stem cells, master cells in the body that have the potential to become any type of cell in the body, had failed because the cells did not form into photo-receptors.

Proof of principle

Researchers had thought that the mature retina, the part of the eye that senses light and forms images, did not have the capacity for repair.

MacLaren and his collaborators showed using precursor cells that are already programmed to become photoreceptors but are not quite there yet was the key to successful transplantation.

"We have taken them out of the donor retina and transplanted them into a host retina extremely quickly at that precise point in time and with minimal trauma to the surrounding tissue," MacLaren explained.

The mice had eye diseases caused by genetic defects.

Scientists have recently found cells on the margin of the retina in humans which have stem-cell like properties and could potentially be grown in the lab to become photoreceptor precursor cells for treatment.

"Rather than focusing on stem cells we believed that if we could understand how cells develop and become photoreceptors ... our transplantation efforts would meet with greater success," said Professor Anand Swaroop, of the University of Michigan Medical School and a co-author of the study.

Carpets in workplace linked to asthma risk

Being exposed to certain types of surface materials at work appears to increase adults' risk of developing asthma, a new study shows.

"These findings underline the need to consider the health aspects of materials used in floor, wall, and other indoor surfaces," Dr Jouni J K Jaakkola of the University of Helsinki in Finland and colleagues conclude in the American Journal of Epidemiology.

A number of materials used in furnishing indoor environments may emit pollutants with the capacity to irritate the airways, the researchers note. While studies have linked certain materials, pollutants and even renovations to asthma in children, they add, there have been no reports on how such exposure might affect adults' asthma risk.

To investigate, the researchers compared 521 adults newly diagnosed with asthma over a 2.5-year period and a control group of 932 adults without asthma. They were surveyed about the materials they were exposed to at home and at work as well as whether they had renovated their homes over the past year.

Exposure to plastic wall coverings on the job increased asthma risk 2.43-fold, the researchers found, while people who worked in offices with wall-to-wall carpeting were 1.73 times more likely to have developed asthma. When mold problems were present at a person's workplace, and there was wall-to-wall carpeting there, the risk of developing asthma more than quadrupled.

Also, while home renovation in itself had no association with asthma risk, the researchers found that people living in homes where plaster had been used to level floors were at an 80 percent increased risk of asthma.

"Our study provides new evidence that both plastic and textile surface materials in workplace indoor environments may play a role in the causation of asthma in adulthood," the researchers conclude.

Source: American Journal of Epidemiology

WORLD AIDS DAY 2006

Momentum building on calls for accountability

KHAIRUZZAMAN KAMAL

The World AIDS Campaign has named "accountability" as the global theme for World AIDS Day 2006. Thousands of campaigns around the world are preparing different events to raise awareness on HIV/AIDS and to call on leaders to keep the promises they have made to tackle AIDS pandemic.

"Actions taken by the governments this year will determine the global response to AIDS for years to come," states Marcel van Soest, Executive Director of the World AIDS Campaign.

The theme of accountability, with the slogan, "Stop AIDS: Keep the Promise", was chosen in consultation with civil society campaigns to stress the critical need to meet current commitments to increase the global response to AIDS and reach universal access to treatment, care and prevention by 2010.

Currently, governments are supposed to be engaged in a target setting process for universal access, called for in a political declaration unanimously approved by the United Nations General Assembly on June 2.

However, there are serious questions about the lack of clarity in the process, which is to be completed at the end of the year. Civil society groups are maintaining pressure on governments to actively set national targets through an inclusive and transparent process.

"This World AIDS Day will show – either we are on the track to reversing the spread of HIV and AIDS, or we have failed to keep the promises by individuals, communities and nations. We will continue to see HIV spread in every country," states van Soest.

The World AIDS Campaign supports, strengthens and connects campaigns that hold leaders accountable for their promises on HIV and AIDS. "Stop AIDS. Keep the Promise" is the World AIDS Campaign from 2005-2010. The campaign secretariat is based in Amsterdam, The Netherlands.

The writer is the Executive Director of Bangladesh Manobadhikar Sangbadik Forum (BMSF).

Don't use decorative contact lenses without consulting a doctor

MD AL MAMUN

It has been estimated that about 125 million people use contact lenses worldwide (2 percent). In Bangladesh contact lenses are well accepted by opticians as well as people due to its convenient use.

Now-a-days there are also "crazy contact lenses" such as cat's eye. These have many risks of complications. These contact lenses, sometimes called non-corrective lenses, do not correct vision and are intended solely to change the color of the eye, but carry serious risks, including permanent eye injury that may lead to blindness. Occasionally men and women even children use those lenses to get a different look. But it is a valuable concern either you are consulting with an optician or not before using this type of lenses.

The US Food and Drug Administration (FDA) warns consumers about the serious risks of using decorative contact lenses without the appropriate involvement of an eye care professional.

Consumers should only use decorative contact lenses if they have seen an ophthalmologist and have obtained proper lens fitting and instructions for use.

Contact lenses carry the risks of conjunctivitis (inflammation of the conjunctiva better known as pink eye); corneal ulcers; corneal abrasion; and vision impairment or blindness.

Furthermore, sharing of contact lenses prescribed for one person can also lead to infections, abrasions, allergic reaction or blindness.

FDA has received reports of corneal ulcers associated with the wearing of decorative contact lenses, especially when worn overnight.

Corneal ulcers, an infection of the eye, can progress rapidly if left untreated. Uncontrolled infection can lead to corneal scarring and vision impairment. In the most severe cases, this condition can result in blindness and eye loss.

We must consult with eye care professional before using any contact lenses even though it is decorative.

The writer is a Product Executive of GlaxoSmithKline Bangladesh Ltd.

Your Doctor on skin diseases

Dr Abdus Sadir
Associate Professor and Head
Department of Skin and VD
Sir Salimullah Medical College
Mitford Hospital, Dhaka

Dear Doctor,
How can we save us from excessive pimple in our faces? Please give me a suggestion.
Regards
Mohammad Rajja
E-mail: the_rajja@cellemail.net

Answer:

A pimple is a type of skin lesion that is caused by inflammation or obstruction the opening of a sebaceous gland that secretes oil to lubricate and protect the surface of the skin.

The most common cause of pimples is acne. In the surface of normal skin, sebum oil passes through the hair follicles to the skin surface. When acne is present, sebum (oil) that normally drains to the surface of the skin get blocked and bacteria begins to grow.

Doctors prescribe medications when acne becomes moderate to severe or is not controlled by over the counter medications. The treatment includes antibiotic with topical benzoyl peroxide, topical retinoid cream (applied directly on the skin).

The outcome for the majority of acne is excellent. The goal in all acne treatment is to prevent scarring. The scarring of acne can also be treated. A skin specialist can tell you about various ways available to treat acne scars. Pimples can be treated with a skin sanding procedure called micro-dermabrasion or also by chemical peels. Lasers and heat light therapy can also be used in treating scars.

A diet high in raw vegetables and fruits is beneficial. Avoid all forms of sugar, alcohol, butter, caffeine, cheese, chocolate, cocoa, cream, fat, fried foods, margarine, hydrogenated oils, soft drinks, iodised salt and processed foods.

To determine if you have an allergy that may be the cause of acne, eliminate aggravating foods for at least one month and slowly return to the diet to see if the acne returns.

The face should be kept free from oil by washing with soap at least three times a day. Do not squeeze the spots as this may increase the growth and development of bacteria, worsening the condition and increasing the chance of scarring. You may also need 15 minutes of sunshine, regular exercise and sufficient sleep every day.

Send health related queries to Your Doctor, Star Health, The Daily Star, 19, Karwan Bazar, Dhaka 1215 or e-mail your problem to starhealth@thedailystar.net

Health News

A YEAR OF CLEANER AND SAFER CARE

Bangladesh participated in live video-link session with WHO headquarter

Government of Bangladesh in association with the World Health Organisation (WHO), Bangladesh participated in a live video-link presentation from Geneva, Switzerland on the global event of "A Year of Cleaner and Safer Care" organised by WHO headquarter, says a press release.

Bangladesh has signed a pledge for patients' safety as a member state of WHO to promote the highest standards of practice and behaviour to reduce the risk of healthcare associated infections in the healthcare centers.

According to the WHO report, every year the treatment and care for millions of patient world wide is complicated by infections acquired during healthcare that makes some patients more seriously ill than they would otherwise have been.

The 55th World Health Assembly adopted in 2002 a resolution urging the countries to pay closest possible attention to the problem of patient safety. Inline with that the world Alliance for Patient safety launched in 2004. WHO and its technical partners have developed strategies to address this global challenge. The WHO guidelines on Hand Hygiene have been developed by technical experts in the field of infection control and prevention. The Guidelines are a major part of the Global Patient Safety Challenge.

The video-link programme would foster and sustain collaboration with the research institutions, training schools, educational centers, universities and health care settings of other WHO member states to ensure full utilisation of knowledge and experiences in the field of health care associated infections.

The video-link sites showed global support for the WHO Guidelines on Hand Hygiene in Health Care by launching a global hand hygiene demonstration.

Bangladesh will be one of the piloting sites for WHO South East Asia Region.

FREE CLEFT SURGERY

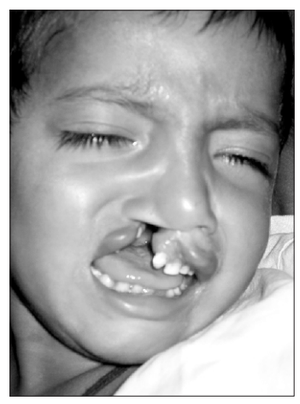
Bringing back hope and dignity by restoring lives

STAR HEALTH REPORT

About 5000 babies are born each year in Bangladesh with congenital abnormalities of cleft lip and cleft palate. Majority of these patients are poor. With cleft deformity, the children are socially humiliated, inaccessible to basic education and face many social obstacle.

Cleft deformities are associated with many congenital anomalies in many cases. A successful reconstruction surgery at an appropriate time allows the children to enjoy their normal lives. But cleft surgeries are very expensive for the poor and middle class families. For these poor patients, cleft surgeries are done free of cost at the Central Hospital in the capital.

Cleft patients are operated on for their congenital deformity through charity, sponsored by The Smile Train. Smile Train is an USA based organisation



dedicated to the reconstruction of cleft lip and palate of poor patients. They work in this field at more than hundreds different hospitals in 60 countries.

Besides funding, Smile Train is committed to monitor the quality of work in every hospital and every surgeon's skill of operation. In Bangladesh, they have been working through The Smile Train-Central Hospital Cleft Project for the last three years. About 1200 children have been operated under this project.

They shared the present and future plan in Bangladesh at a press conference held at Central Hospital yesterday. President of Smile Train Brian Mullaney, National Professor and Chairman of Central Hospital Prof M R Khan, plastic surgeon Prof A J M Salek, other directors of Central Hospital, eminent doctors and patients were present in the press conference.

Prof M R Khan expressed with grief that they are facing great problem while clearing the donation from Smile Train, which is completely used for the charity. He urged assistance from the government to help the distressed people in this regard.