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Editorial

Nail and dermatologist

Nails have caught much attention in human civilisation. In recent Chinese history, using artificial nails for nail protection and beautification was fashionable. This is evidenced in the portrait of Dowager Empress Cixi. Human nail is by no means redundant. A healthy nail not only gives good cosmesis, it scratches to get away noxious stimuli, provides physical protection, enhances the finger pulp to perceive pressure and is thus important in fine manipulation and improving manual dexterity. Human nail embryogenesis first starts at the 9th week of gestation and by the 25th week, nail unit differentiation appears complete. Normal nail growth is under a wide array of influences that include genetic and environmental factors. Like the skin and hair counterparts, nails are visibly overt. Any deviation from normality in terms of nail colour, lustre, thickening and brittleness is obvious both to its owner and others.

Nail cosmesis is popular nowadays. However, a beautified nail does not equate with a healthy nail. Indeed, adverse effects may occur consequent to use of nail cosmetics or manicuring. Nail cosmetics and related products may contain formaldehyde resin, ethyl/butyl acetate, toluene, isopropyl alcohol, acetone, camphor, and methyl acrylate. In addition, some products may install small balls of metal such as nickel inside the container for the purpose of shaking so as to make the contents evenly dispersed before application. Due to the robust nature of the keratinous nail plate, these components do not necessarily cause any clinical nail problems. However, their inadvertent transferal to periungual skin or distant sites causing contact dermatitis is a possibility. Manicuring of nail by non-medical personnel is another issue that dermatologists should be aware of. Manicuring might involve soaking of hands or feet in bath and paring away of periungual tissue and nail cuticle, the latter being a natural barrier protecting the nail unit. In addition, improperly sterilised equipment for nail manicure may be used. As a result, the risk of ungual or periungual irritation and bacterial, fungal or viral infections may be increased.

Unlike its skin counterpart, the wide array of nail diseases has not gained sufficient attention by clinicians. One reason for that is the hard keratinous nail plate obviates easy access. An abnormal nail would often be interpreted by the lay public and clinicians alike as "grey nail". What is a grey nail (灰甲)? A grey nail is not a diagnosis and it just means greyish discoloration of nail. Unfortunately, in this locality, it is often used interchangeably for onychomycosis and even its Chinese term (灰甲) can still be seen in drug advertisement. Admittedly, the issue might not be so important in the past. However, with the advancement in knowledge and management techniques on nail diseases the use of this medical jargon should be avoided by dermatologists. In fact, the chance that an abnormal looking nail

being attributed to fungal infection is only about 50%. In young patients, this proportion is even smaller. Thus, proper education to the public on nail health and common nail conditions and acquisition of broader knowledge by clinicians on nail diseases are warranted.

There is at present no discrete training scope in onychology for dermatology trainees. In an overseas training more than 10 years ago, I only had a half-day teaching session on hair and nail diseases. One session was not enough but fortunately the one that I had was intriguing. At present I found managing nail disorders difficult, challenging but interesting. To further pursue in this less glamorous subspecialty, one should possess an interest in the field. Careful history taking often help clinicians to elucidate the possible underlying causes. One should not be casual in recording nail signs. Accurately recorded information helps clinicians to make an accurate diagnosis, assessing treatment response and progress. The use of a nail chart or photos simplifies the job. Surgical procedures are sometimes required to "overcome" the insurmountable keratin, allowing dermatologists to unravel the cause. Although nail surgery needs more meticulous skill than excision of a small skin lesion, some nail procedures can still be safely performed in the office. Nail tubing for early, uncomplicated ingrowing toenail and nail avulsion for single grossly thickened onychomycotic nail not amendable to antifungals are good examples. Management of some nail diseases can be enhanced by modern imaging techniques. High frequency ultrasound and magnetic resonance imaging (MRI) are useful tools in the diagnosis and are accurate in locating a small ungual tumour especially when it is deeply seated within the nail bed and matrix.

To complete the picture, a few comments on pigmentation are necessary. Spontaneous pigmentation in a single nail, also termed melanonychia, affecting a Caucasian often raises the suspicion of an ungual melanoma. Fortunately it is often not the case in the Chinese population. It is reassuring to note that the lesser toes are common sites for "friction" melanosis while melanonychia in a thickened big toenail could be fungal in origin. Of course, careful assessment is always needed in order not to miss an early ungual melanoma as acrolentiginous melanoma is more prevalent in Asians. Thin lesion, multiple nail involvement and absent Hutchinson's sign without nail destruction favour benignity. On the contrary, prompt referral should be made to surgical colleagues for cases with single large lesion and the presence of tissue destruction.

The nails can be affected by a white array of conditions and clinical manifestation of nail diseases can be protean. Equipped with modern diagnostic facilities and field practice, dermatologists would certainly find management of nail diseases not only challenging but rewarding.

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