The dysplastic naevus: concepts and controversies – 2007

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Date: 2 February 2007  
Venue: Washington Convention Center, Washington D.C., USA  
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The first report of dysplastic naevi (atypical naevi) was published in 1820. However, it was not until 1978 that Clark and his colleagues published their study on familial melanoma. They found out that individuals in these families who had certain atypical moles were at higher risks of developing melanoma. Report of dysplastic naevi in non-familial melanoma was soon published afterwards.

Dysplastic naevi (DN) are recognised as both markers and potential precursors for melanoma. In familial setting, the probability of a dysplastic naevus to develop into a melanoma between the ages of 29 and 59 years may approach 60%. In non-familial setting, the cumulative lifetime risk for developing melanoma is only less than 5%. Further, reports have demonstrated risk for developing melanoma increases with increasing number of dysplastic naevi.

Dysplastic naevi can be classified clinically into three categories:

Mild DN: Slightly irregular shape, fuzzy border, 'fried-egg' appearance

Moderate DN: Moderately irregular shape, >6 mm, 2-tone pigmentation with slight asymmetry

Sever DN: Very irregular shape, multi-tone pigment, marked asymmetry

The current approach in managing dysplastic naevi is still excision but in a more conservative manner. The underlying reasons are: (i) the majority of dysplastic naevi are stable and do not develop into melanoma; (ii) in patients with dysplastic naevi, the melanoma may develop de novo; (iii) removing dysplastic naevi does not eliminate the risk for developing melanoma or the need for close follow-up; (iv) it is impractical to remove all dysplastic naevi if the patients have many lesions. As a result, regular observations of the mild DN at 6 to 12 months intervals and excision of the severe DN is the rule. Baseline photos can improve the diagnostic accuracy and help detecting minor changes in dysplastic naevi. Furthermore, it is important to counsel the patients on the warning signs and symptoms of melanoma and on sun protection.

Learning points:  
Recognition of dysplastic naevi is important as they are both markers and potential precursors for melanoma. In familial setting, the probability of a dysplastic naevus to develop into a melanoma between the ages of 29 and 59 years may be as high as 60%. As a result, regular observations of the mild DN at 6 to 12 months intervals and excision of the severe DN are recommended.