

Histopathology Meeting

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 Venue: Lecture Theatre, 12/F, Block R,
 Queen Elizabeth Hospital
 Organiser: Hong Kong Society of
 Dermatology and Venereology
 International Academy of
 Pathology (HK Division)

Spitz naevi, atypical variants and childhood melanoma

Speaker: Prof. Martin Mihm
 Professor, Department of Pathology, Harvard
 Medical School, USA

Spitz naevus

Spitz naevus usually presents with a dome-shaped papule or nodule with a pink-tan or reddish colour. The most common site is on the face. The growth is usually rapid. Histologically, nests of large epithelioid cells, spindle cells or both are present. They extend from the epidermis into the reticular dermis in an inverted wedge configuration. The closely apposed nests of cells within a uniformly hyperplastic epidermis gives rise to a "raining down" appearance. The dermal collagen is orderly infiltrated by these nests or cells with so-called maturation (gradual decrease in nuclear and cellular sizes). Treatment is complete surgical excision.

Spindle cell naevus

Pigmented spindle cell naevus presents as a black or dark plaque, sometimes it can be dome-shaped. The size is usually 2-6 mm in diameter. It is most commonly located on proximal extremities or the trunk. Classically, it

is found in young adults or children. This condition is a spindle cell variant of Spitz naevus.

Atypical Spitz tumour

Atypical Spitz tumour is usually greater than 1 cm in size, asymmetrical, with poor demarcation in morphology. Histologically, there is irregular nesting and deep extension. Treatment comprises conventional melanoma therapy, together with sentinel lymph node biopsy for high risk lesions.

Spitzoid melanoma

It is a type of nevoid melanoma that shows histologic features of Spitz naevus. Usually, it presents at the head and neck region in children. Treatment comprises conventional melanoma therapy. Sentinel lymph node biopsy for lesions of thickness greater than 1 mm is needed.

Childhood melanoma

Childhood melanoma is a rare disease with an estimated incidence of one per million per year. The majority of melanomas arise in association with precursor lesions, follow-up of children with congenital and/or dysplastic naevi is recommended. Histologically within the tumour cells, there is severe pleomorphism, numerous dermal and marginal mitoses, vascular and lymphatic invasion.

Learning points

Spitz naevus, spindle cell naevus, Spitzoid melanoma and melanoma may be present in children. A high clinical suspicion is necessary and surgical excision is needed.

Clinicopathological cases from St. John's – Part I

Speaker: Dr. J. Eduardo Calonje
Director, Department of Diagnostic Dermatopathology,
St. Thomas's Hospital, UK

Dr. Calonje presented several interesting cases from St. John's Hospital

Case 1

A 34-year-old pregnant lady presented with a firm, ulcerated nodule over forehead. She had history of anaplastic oligodendroglioma and was treated with surgery and radiotherapy four years ago. Skin biopsy showed it was osteosarcoma of the skin. Osteosarcoma can be primary or secondary to radiotherapy.

Case 2

A 28-year-old gentleman, being HIV antibody positive, presented with a six months' history of pruritic nodular lesion over the right ear. There was also some hearing loss. Skin biopsy and special staining (Grocott methenamine silver) were performed and the result was otic pneumocystosis, caused by *Pneumocystis jiroveci*. Pneumocystosis is the most common opportunistic infection in AIDS patients. However, extra-pulmonary pneumocystosis is uncommon. The clinical presentation is hearing loss, vertigo, tinnitus and otalgia.

Case 3

A 40-year-old lady presented with an asymptomatic nodule over her right thigh for 13 months. Skin biopsy result was cutaneous perivascular epithelioid cell tumour (PEComa). It is a type of mesenchymal tumour consisting of perivascular epithelioid cells (PECs).

Case 4

A 25-year-old lady presented with an asymptomatic, slowly growing tumour over the right wrist. Skin biopsy showed primary cutaneous clear cell sarcoma (malignant melanoma of soft tissues). It is a relatively rare condition that occurs in adolescents or young adults. It presents commonly at cutaneous site

of distal extremities and rarely at gastrointestinal tract or bone. This condition is prone to local recurrence and metastasis with a death rate of about 70%. Histology shows nests of oval to spindle cells with vesicular basophilic nuclei, eosinophilic to clear cytoplasm. Multinucleated giant cells and melanin are frequently seen.

Case 5

It was a case of incontinentia pigmenti presented as an subungual growth. It is an X-linked dominant disorder that follows Blaschko's line. It involves ectodermal tissues of different systems. Skin, hair, nail, teeth, eye and central nervous system may be involved.

Case 6

Dr. Calonje presented a case of ectopic meningeal hamartoma. It usually presents as a cutaneous or subcutaneous nodule or plaque on the scalp. It is a congenital disorder but may only be recognized at childhood or adolescence.

Case 7

A patient presented with a persistent, painful subcutaneous nodule at the vaccination site. Skin biopsy showed characteristic histiocytes with violaceous granular cytoplasm. It is a case of aluminum granuloma, due to hypersensitivity to an ingredient of vaccine.

Case 8

It is a case of subcutaneous panniculitis-like T cell lymphoma. Clinically, it presents as an erythematous or violaceous subcutaneous nodule or plaque. Ulceration is uncommon. Hepatosplenomegaly, coagulopathy and systemic symptoms, e.g. fever, myalgia and weight loss, may be present.

Learning points

Skin biopsy should be performed to patients with persistent lesions. Clinical and pathological correlation is needed for the diagnosis of skin diseases.