SKIN

MAIN CATALOGUE

CASE 25
No details are available.
The specimen consists of a left ear which has an irregular necrotic tumour 4 x 3cm, occupying the upper half of its posterior surface.
Diagnosis: Squamous cell carcinoma of the ear
What is likely to be seen on histological examination of the tumour? Microscopically there would be sheets of cells showing cytological features of malignancy (nuclear hyperchromasia, enlargement, pleomorphism, prominent nucleoli) and of squamous differentiation (abundant eosinophilic cytoplasm, focal keratin formation in keratin pearls, and intercellular bridges) invading the dermis.
How do squamous cell carcinomas (SCC) differ macroscopically from basal cell carcinomas (BCC)? SCCs tend macroscopically to be variably nodular scaly hyperkeratotic lesions. BCCs typically form a small pearly nodule, although some form flat indurated lesions. Ulceration is not unusual. The position may also aid macroscopic diagnosis: BCCs are less common on the arms, being more common on the upper body and face.

CASE 78
The specimen comprises an oval portion of skin 4 x 3 x 0.5cm with an irregular 1cm nodule centrally.
Diagnosis: Tumour of the skin (said to be a melanoma)

CASE 180
This patient had an 'epithelioma' treated with radiotherapy.
The specimen is the right hand. On its dorsal aspect is a deep rounded 4cm ulcer.
Diagnosis: Radiation induced necrosis.

CASE 1461
No clinical details are available.
The specimen consists of a right ear. An irregular fungating tumour measuring 4cm in maximum dimension arises from the lateral aspect. The tumour obstructs the external auditory meatus.
Diagnosis: Squamous cell carcinoma of the ear
What is likely to be seen on histological examination of the tumour? Microscopically there would be sheets of cells showing cytological features of malignancy (nuclear hyperchromasia, enlargement, pleomorphism, prominent nucleoli) and of squamous differentiation (abundant eosinophilic cytoplasm, focal keratin formation in keratin pearls, and intercellular bridges) invading the dermis.

CASE 3705
The specimen comprises three rectangular portions of skin measuring up to 4cm in diameter. From each arises numerous pedunculated skin coloured nodular lesions measuring up to 2.5cm in dimension.
Diagnosis: Neurofibromata

CASE 4185
The specimen is of right hand. The 3rd, 4th and 5th fingers have been amputated. On the ulnar aspect of the hand is a 7 x 12cm necrotic elevated tumour. A 1cm area of ulceration is present over the 2nd metacarpophalangeal joint.
Diagnosis: Malignant tumour (said to be a squamous cell carcinoma) in amputation scar of hand.

CASE 4210
The specimen comprises an oval portion of skin measuring 6 x 3.5cm with underlying subcutaneous tissue. The specimen has been bisected through a punctum leading to a 3.5cm cavity containing hair beneath.
Diagnosis: Pilonidal sinus

CASE 4266
The specimen is a left hand and forearm. The hand shows areas of depigmentation. The fingers are grossly shortened and virtually no fingernails remain. In addition there are patchy areas of ulceration and crusting of the skin.
Diagnosis: Leprosy

CASE 4493
The specimen is the right leg of an infant amputated at the knee. The leg is swollen with focal discoloured nodules. There is an area of ulceration 3 x 1.5cm on the lateral aspect.
Diagnosis: Haemangioendothelioma (the diagnosis requires histological confirmation).
Comment: Undergraduates would not be expected to diagnose this case. There are a variety of different haemangioendotheliomas. The term refers to a group of vascular lesions of which there are several subtypes and whose histological and behavioural features occupy an intermediate position between benign (angioma) and malignant (angiosarcoma) endothelial lesions.

CASE 4663
The specimen comprises two rectangular portions of skin measuring up to 4cm in diameter. From each arises several skin coloured nodular lesions measuring up to 1cm in dimension.
Diagnosis: Neurofibromata

CASE 4699
No clinical information is available.
The specimen is a left hand and forearm. There is a very large tan coloured lesion with raised edges 10cm in length extending around half the circumference of the wrist on the radial aspect. The lesion ulcerates deeply into the soft tissues of the wrist to expose tendons. Another ulcerating lesion is present involving much of the proximal aspect of the 4th finger.
Diagnosis: Malignant lesions of the hand.
Comment: These were said to be squamous cell carcinomas. Histology would be required for confirmation. These ones are very unusual because of their size.

CASE 4942
Lesion on the scalp from a man aged 73.
The specimen consists of a portion of skin and attached subcutaneous tissue measuring 7 x 8cm. Arising from its centre is a 5.5cm diameter fungating tumour with rather irregular rounded edges and central ulceration.
Diagnosis: Squamous cell carcinoma
How do squamous cell carcinomas (SCC) differ macroscopically from basal cell carcinomas (BCC)?
SCCs tend macroscopically to be variably nodular scaly hyperkeratotic lesions. BCCs typically form a small pearly nodule, although some form flat indurated lesions. Ulceration is not unusual. The position may also aid macroscopic diagnosis: BCCs are less common on the arms, being more common on the upper body and face.

CASE 11685
The patient was an elderly aboriginal man who was admitted to the Port Augusta hospital in April 1958 with a large malignant melanoma of the left foot, proven by biopsy. He was transferred to Adelaide and the foot was amputated. Post-operative course was uneventful. The inguinal nodes were clear of metastases and chest x-ray was also clear.
The specimen consists of the left foot amputated through the ankle joint. On the plantar surface is a circular black lesion involving the big toe, 2nd, 3rd and 4th toes and extending proximally for some 6cm on the sole. Its centre is irregular and roughened in places, with some areas of pallor. There is a large central

ulcer with a black floor. The tumour extends through the inter-digital clefts to the dorsal aspect of the foot involving the 1st, 2nd and 3rd toes.
Diagnosis: Malignant melanoma
Comment: Malignant melanoma in aboriginals is rare. The position of this one is in keeping with it being an acral lentiginous melanoma. This type of melanoma is more common in blacks.

CASE 13484
The patient was a woman aged 79 who had an ulcer on the skin of the left deltoid region for 8 years. During the last 2 months it had increased rapidly in size.
The specimen consists of an ovoid portion of skin with attached subcutaneous tissue measuring 15 x 10 x 2cm. On the surface is an ovoid ulcer 10 x 6cm with pale raised edges and a smooth floor. At one end is a large fungating firm nodule measuring 4 x 2.5cm which projects 1cm above the surface.
Diagnosis: Basal cell carcinoma

CASE 13518
The patient was a man aged 45 with a 9-month history of cough, haemoptysis, night sweats, anorexia, weight loss and pain in the upper right chest. A right pneumonectomy was performed for bronchogenic carcinoma and a month later supraclavicular nodes were excised. He was then treated by radiotherapy but died. At postmortem numerous subcutaneous secondary nodules were present over the chest, abdomen and thighs.
The specimen consists of a strip of skin measuring 16 x 6cm with attached subcutaneous tissues. Rounded nodules up to 1cm diameter are visible projecting beneath the surface.
Diagnosis: Metastatic deposits in skin from lung carcinoma

CASE 14412
The patient was a man aged 69 who had a brown patch on the calf as long as he could remember. A lump developed in it 5 years ago, grew slowly and bled 4 months ago. Inguinal nodes were not palpable and x-ray of the chest was clear. The mass was excised.
The specimen consists of an ovoid piece of skin measuring 9 x 8cm with attached subcutaneous tissue. Towards the centre is a raised pigmented multinodular mass measuring 4 x 3cm with focal ulceration.
Diagnosis: Malignant melanoma
Histology showed malignant melanoma.
What are the most important prognostic features for melanoma? The presence or absence of lymph node or distant metastases. In the absence of metastases the most important feature is the depth of invasion (Breslow thickness).

CASE 14486
The patient was a man aged 82. No history is available. At postmortem there was fibrosis in the lungs and 4 dome shaped tumours on the left lower leg.
The specimen consists of two portions of skin from the leg. On each are well-circumscribed rounded nodules. The upper mass shows some superficial ulceration.
Diagnosis: Mycosis fungoides.
Comment: This diagnosis cannot be made from the specimen. Histology reportedly demonstrated neoplastic lymphocytic infiltration. Mycosis fungoides is a distinct clinicopathologic type of T cell lymphoma arising in the skin. The macroscopic appearance varies widely from erythematous or hyper or hypopigmented patches to elevated plaques to tumour nodules.

CASE 14705
The specimen of skin demonstrates a bisected nodular pigmented lesion about 1cm in diameter.
Diagnosis: Haemangioma
Comment: The differential diagnosis of this lesion includes malignant melanoma. Histological section reportedly showed large rounded blood-filled spaces.

CASE 14799
The patient was a woman aged 52. Seventeen years ago she had a carcinoma of the ovary for which deep x-ray treatment was given to the lower abdomen. Radionecrotic ulcers developed in the overlying skin. Six months ago a biopsy showed squamous cell carcinoma. The ulcer was excised.
The specimen consists of an ovoid piece of skin, subcutaneous tissue and fascia measuring 12 x 9 x 2cm. Much of the surface is covered by an irregular nodular necrotic ulcer with sloughing floor. At one end is a neoplastic overgrowth forming a mass measuring about 4 x 3cm.
Diagnosis: Squamous cell carcinoma.
Histology showed poorly differentiated squamous cell carcinoma.

CASE 15229
The patient was a man aged 26 who had had a lesion on the right thigh for years, enlarging during the last 2 months. Inguinal nodes were not involved. The lesion was widely excised.
The specimen consists of a rectangular piece of skin measuring 9 x 8cm with underlying subcutaneous tissue. In the centre is a brown pigmented lesion 2cm in diameter with a papillomatous nodule 1.5cm diameter towards one side.
Diagnosis: Malignant melanoma
Histology showed malignant melanoma.
What are the most important prognostic features for melanoma? The presence or absence of lymph node or distant metastases. In the absence of metastases the most important feature is the depth of invasion (Breslow thickness).

CASE 16555
The patient was a woman aged 66 who had had bullous eruptions on the back for about 12 months. The initial lesions healed but fresh groups appeared periodically and finally the whole of the back, scalp and inframammary skin became involved. Biopsy showed pemphigus. She was treated with large doses of steroids and antibiotics without success. She died of pulmonary embolism.
The specimen consists of a large area of skin with attached subcutaneous tissues measuring 17 x 9cm. Much of the surface shows areas of congestion and exudation with rather irregular serpiginous edges.
Diagnosis: Pemphigus
Comment: Undergraduates would not be expected to diagnose this one. Pemphigus refers to a group of autoimmune blistering diseases of the skin and mucus membranes.

CASE 17938
No clinical details are available.
The specimen consists of a piece of skin from which protrudes a keratinous horn 2cm in diameter at its base and approximately 6cm long.
Diagnosis: Cutaneous horn
Comment: Such lesions are made of keratin and may form from a variety of underlying lesions such as squamous cell carcinoma and solar keratosis.

CASE 18531
The patient was a man aged 59 who had had multiple cutaneous xanthomata for 30 years. The serum cholesterol was elevated. Marked atherosclerosis was found in vessels in many organs at postmortem.
The specimen consists of a length of skin measuring 17 x 6cm. Projecting from it are large rounded pedunculated tumours, the largest measuring 3.5cm in diameter. One of these nodules shows some superficial haemorrhagic ulceration and necrosis. **Diagnosis:** Pedunculated cutaneous xanthomata
Comment: This is a difficult diagnosis to make macroscopically. Histology showed fat-laden histiocytes and occasional giant cells.

CASE 18897
The patient was a woman aged 46 with proven Mycosis fungoides for 11 years. It began as a small lesion that became generalized 7 months ago. Treatment was ineffective. At post-mortem there was neoplastic involvement of both lungs in the form of nodules 1-2cm in diameter. There was a generalized eruption covering the whole of the skin surface consisting essentially of large raised nodules and occasional bullae.
The specimen consists of two large portions of skin with attached subcutaneous tissue. Rounded nodular masses project from the surface.
Diagnosis: Mycosis fungoides
Comment: This diagnosis cannot be made from the specimen. Histology reportedly demonstrated neoplastic lymphocytic infiltration. Mycosis fungoides is a distinct clinicopathologic type of T cell lymphoma arising in the skin. The macroscopic appearance varies widely from erythematous or hyper or hypopigmented patches to elevated plaques to tumour nodules.

CASE 19915
The patient was a man aged 22 who had noticed symptoms for two years.
The specimen consists of an ovoid piece of skin and subcutaneous tissues measuring 8cm in length. On the surface of the skin is a bisected irregular pale nodular thickening some 2.5 long. Deep to this is an area of fibrosis from which a tuft of hairs protrudes.
Diagnosis: Pilonidal sinus
Histology showed a typical epidermoid sinus with much chronic and some acute inflammatory reaction.

CASE 23096
Removed for "cosmetic reasons".
The specimen consists of an ovoid piece of skin measuring 9 x 4cm. The greater part of the free surface is covered by an ovoid pigmented mass with a finely nodular surface measuring 1cm in depth. On section, pigment is confined to the epithelium.
Diagnosis: (said to be) a melanocytic naevus
Comment: The differential diagnosis macroscopically includes a large pigmented seborrhoeic keratosis.

CASE 23789
The specimen is of a portion of nose including both nostrils, portion of nasal septum and surrounding skin. On the right nostril extending up to the dorsum of the nose and inwards into the nasal cavity is a 5cm nodular brown coloured tumour that has ulcerated the skin.
Diagnosis: Squamous cell carcinoma
Histology showed a moderately differentiated squamous cell carcinoma.

CASE 25382
The patient was a full-blooded aboriginal woman aged 53, from the Alice Springs region. It is not known how long she had had chronic granulomatous infection of the right ankle, but almost surely of several years' duration. She was first seen in the Alice Springs Hospital in February 1975, when x-ray showed no evidence of bone involvement. There was therefore some hope of dissecting out the affected tissue, but she refused surgery and absconded. When she presented again in June 1975, the lesion had extended and x-ray showed involvement of the calcaneum. She was persuaded (with difficulty) to have an amputation. Smears of the pus taken in February 1975 were reported to contain Nocardia mycetoma.
The specimen consists of half the right foot and lower leg, divided in the median sagittal plane. The region of the ankle joint is greatly swollen. Many large nodular scabbed masses are present on the skin surface. They are generally ovoid and vary in size up to about 2 x 3cm. Longitudinal section shows a pocket of pus in the upper portion of the calcaneum, and three affected sinuses posteriorly.
Diagnosis: Mycetoma (madura foot)
Comment: Histology showed much fibrosis with chronic inflammatory infiltration surrounding pockets of frank pus in which neutrophil leucocytes predominated. Many PAS positive mycelial masses (sulphur granules) were present within the abscesses. The whole appearance, both gross and microscopic, is classically that of the so-called Madura foot, a slowly progressive disfiguring infection of the skin, soft tissues and underlying bone, usually arising in the tropics following inoculation by a variety of soil dwelling fungi or bacteria.

CASE 50410/82
The patient was a man aged 68 who died from disseminated malignant melanoma following excision of a primary lesion from the left calf four years previously.
The specimen is of retroperitoneal tissues and a kidney. A huge lobulated mass of partly haemorrhagic necrotic tumour is present in the retroperitoneal fat.
Diagnosis: Metastatic malignant melanoma
Comment. The tumour may represent extra capsular extension of lymph node metastases. Confirmation that it is melanoma would of course require histological examination.

CASE 50469/83
The specimen includes portions of thyroid, intestine and kidney. There are single well-circumscribed deeply pigmented lesions in each. The intestinal metastasis has ulcerated.
Diagnosis: Metastatic melanoma
Comment: Melanoma frequently metastasises to unusual sites.

CASE 1582/87
The patient was a man aged 52. Lesion from the anterior abdominal wall.
The specimen mainly comprises tumour with a small amount of attached muscle and fat. The tumour forms an oval mass of grey and white tissue.
Diagnosis: Musculoaponeurotic fibromatosis or 'Desmoid tumour'
Comment: Undergraduate students would not be expected to diagnose this. The anterior abdominal wall is a classic site for desmoid tumour (one of the fibromatoses). These locally-infiltrating fibroblastic tumours require adequate local excision for their control.

CASE 90163/92
The patient was a man aged 19. Sinus in the natal cleft.
The specimen is a small piece of skin with underlying subcutaneous tissue. Within the subcutaneous tissue is an irregular 5mm cavity with florid surrounding fibrosis. The centre of the cavity contains some old blood.
Diagnosis: Pilonidal sinus