

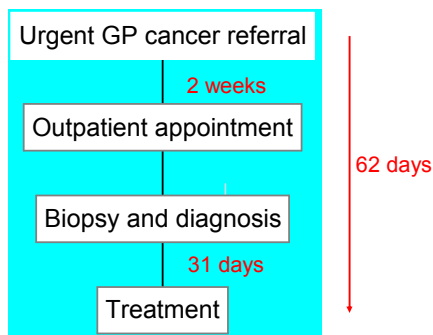
Rapidly growing eyelid tumours

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Primary malignant lesions

- Malignant melanoma
- Sebaceous gland carcinoma
- Squamous cell carcinoma (SCC)
- Lymphoma
- Kaposi's sarcoma
- Merkel cell carcinoma
- Others eg adenocarcinoma, adnexal CA, sweat gland CA

DoH Cancer waiting times



Multidisciplinary teams

To facilitate and to co-ordinate a high quality service for the diagnosis, treatment and follow-up of patients with cancer

Multidisciplinary Teams		
Local Skin Cancer MDT	Specialist Skin Cancer MDT	Lymphoma MDT
SCC / BCC - recurrent or incompletely excised MM <1mm depth Skin cancers suitable for radiotherapy Lesions with uncertain diagnosis	MM >1mm depth / multiple / in children Metastatic BCC / SCC / MM Rare skin tumours eg Seb gland, Merkel cell Immunocompromised / genetic predisposition	Lymphoma

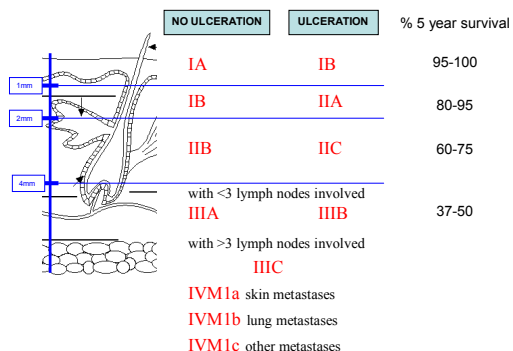
Malignant melanoma

- New pigmented lesion that is growing
- Mole changing shape / colour / size / itching / bleeding
- Mole with 3 or more colours
- 160 per million in UK (20% are head & neck)
- Incidence varies with latitude & population type
- 200,000 cases annually worldwide
- Causes majority of deaths due to skin cancer (75%)

Malignant melanoma

- Types
 - Nodular melanoma
 - Lentigo malignant melanoma
- Risk factors
 - intermittent, intense sun exposure
 - fair skinned
 - red / fair hair
 - family history of MM
 - multiple naevi
 - sun beds

Pathological staging of MM



Management

Biopsy

- photograph lesion
- complete excision biopsy with 2mm margin
- avoid shave excision or punch biopsy

Surgery

- only curative treatment
- wide margin (depends on site)
 - 1cm for <1mm depth
 - 2cm for <4mm
 - 3cm for >4mm

Sentinel lymph node biopsy (SLNB) for > Stage IB

Sebaceous gland carcinoma

- Head and neck tumour, 75% in eyelids
- Upper > lower lid
- Very rare - 2 cases per million population
- Pinkish lump with lipid contents
- Can grow large - up to 4 cm
- High risk of local recurrence & metastasis
- 5 year survival 70%
- Masquerade syndrome
 - recurrent chalazion
 - blepharitis
 - conjunctivitis

Histopathology

- Arise from pilosebaceous glands
 - meibomian glands
 - glands of Zeis
 - caruncle and brow
- Lipid stains (oil-red-O) of fresh tissue not exposed to alcohol - warn your pathologist
- Loss of normal architecture of sebaceous gland
- Replaced by pleomorphic cells with prominent vacuolated (foamy) cytoplasm
- 10% are multicentric
- Pagetoid (intraepithelial) spread in 50%

Management

- Surgery with wide excision
- May require exenteration
- Histological guidance may help but still need wide clearance because of multicentric nature.
- Assess pagetoid spread with conjunctival map biopsies
- SLNB to assess metastases
- Prognosis is related to time to diagnosis

Muir-Torre syndrome

- At least one cutaneous neoplasm
 - sebaceous adenoma
 - sebaceous epithelioma
 - sebaceous carcinoma
 - keratoacanthoma
- At least one visceral carcinoma
 - colorectal CA (50%)
 - genitourinary
 - breast
 - lymphoma
- Genetic basis in > 50%
 - Mutation prevents DNA mismatch repair
 - Associated with hereditary nonpolyposis colorectal cancer (HPPCC)

Squamous cell carcinoma

- 2nd commonest skin tumour
- 0.5% of eyelid tumours
- Grow over weeks
- Indurated nodule - keratinised or crusted
- Metastatic risk varies 3 - 10%
- Risk factors
 - chronic ultraviolet light exposure
 - actinic keratosis / Bowen's disease
 - xeroderma pigmentosa
 - previous radiotherapy
 - human papilloma virus
 - immunosuppression

Histopathology

- Proliferation of normal & atypical squamous cells
- Cells invade the dermis - a shave biopsy may not be able to show this
- Variable keratinisation
- Some benign tumours share histopathological features with SCC where inflammation stimulates epithelial proliferation and rapid growth
 - Keratoacanthoma
 - Inverted follicular keratosis

Squamous cell carcinoma

- High risk tumours
 - Large > 4cm and deep invasion
 - Poorly differentiated
 - Perineural involvement
 - Immunosuppression
- Complete excision of tumour with histological confirmation
- Minimum 4mm margin. More in high risk cases
- Clinically enlarged nodes need biopsying
- Radiotherapy for non-resectable tumours
- 95% local recurrences occur within 5 years so follow up for this time in high risk tumours

Lymphoma

- Adnexal lymphoma is generally subconjunctival (salmon patch) or in orbit
- Rarely in eyelid
- Smooth, firm, beige mass or thickening of eyelid
- Commonly associated with systemic lymphoma so need systemic investigation

Lymphoma

- NHL - Generally B cell lymphoma
- Rarely cutaneous T cell lymphoma
 - Mycosis fungoides
 - Sezary syndrome
- Biopsy - immunohistochemistry
- Radiotherapy if localised to the eyelids
- Chemotherapy if systemic lymphoma

Kaposi's sarcoma

- Cancerous tumour of connective tissue
- Reddish-purple lump under the skin - blood vessels and cancer cells
- Rapidly growing in AIDS / immunosuppressed patients
- Interaction between HIV & human herpes virus 8
- Treatments:
 - Radiotherapy
 - Surgery
 - Chemotherapy
 - Interferon

Human tumour viruses

Theory that host cell mutations from mutagens such as UV light or radiation act together with integrated virus and result in tumour formation

Virus		Cancer
Epstein-Barr virus	EBV or HHV-4	Burkitt's lymphoma Non Hodgkins lymphoma
Human papilloma virus	HPV	Cervical cancer Genital SCC
Human T-lymphotrophic virus	HTLV 1	T cell leukaemia
Hepatitis B and C	Hep B, Hep C	Liver cancer
Kaposi's sarcoma herpes virus*	KSHV or HHV-4	Kaposi's sarcoma
Merkel cell polyoma virus*	MCPV or MCPyV or HHV-8	Merkel cell carcinoma

* Moore & Chang

Merkel cell carcinoma

- Merkel cells are touch receptors in epidermis
- Also have hormonal functions
- Rare neuroendocrine tumour - increasing incidence
- Highly aggressive
- Firm, flesh-coloured to red-violet lump
- Risk factors - age, fair skin, UV exposure, immunosuppression
- Merkel cell polyomavirus (MCPV or MCPyV) found in 80% of tumours. Common infection in humans
- Mutated virus monoclonally integrated into cancer cell genome

Merkel cell carcinoma

- 5 year survival
 - 70-90%
 - 40% if nodes involved
- Metastases: skin, lymph, liver, lung and bone
- Surgical excision with wide (>2cm) margin
- Adjuvant radiotherapy improves survival by 30%
- SLNB - radiotherapy to involved nodes
- Chemotherapy for late stage disease

Keratoacanthoma

- Grows quickly over a few weeks
- Firm, dome-shaped red lump. Can grow up to 3cm
- Smooth surface with a central, keratin brown plug
- May take up to a year to resolve
- Heals & flattens leaving a depressed, puckered scar

Keratoacanthoma

- Originates in pilosebaceous glands
- Resembles SCC both clinically & pathologically - some consider it to be low grade malignancy
- Requires complete excision and not shave biopsy
- Can rarely progress to SCC
- Muir-Torre syndrome
- Risk factors
 - UV exposure
 - wart virus
 - immunosuppression
 - minor injuries