BCCs: Diagnosis and Non-Surgical Management

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BCCs

- Most common form of cancer in UK
  > 48,000/yr and rising by 1.5%/yr
- Rarely fatal, metastasis v. rare
- Destruction of important anatomical structures
- Complex repair required more often than for MM
- Prevention and early diagnosis crucial
Clinical presentation

• Nodular
• Superficial
• Morphoeic
• Pigmented
• Basosquamous
Pyogenic granuloma
Superficial BCC

- Often multiple
- Upper trunk and shoulders
- Erythematous well demarcated scaly plaques
- dd Bowen’s disease, inflammatory dermatoses
- Medical management
Pigmented BCC

• Brown, blue, greyish

• Nodular or superficial histology

• dd includes malignant melanoma
Morphoeic BCC

- Mid-facial sites
- Skin-coloured, waxy, scar-like
- Infiltrative
- Perineural spread
- High risk recurrence
Guidance on Cancer Services

Improving Outcomes for People with Skin Tumours including Melanoma

The Manual

February 2006

Developed by the National Collaborating Centre for Cancer

Guidance on cancer services

Improving outcomes for people with skin tumours including melanoma (update)

The management of low-risk basal cell carcinomas in the community

May 2010

Developed by the National Collaborating Centre for Cancer
Essex Cancer Network

Skin NSSG Constitution

Skin Cancer including Melanoma
Network Organisational Arrangements, Referral, Diagnosis and Management Guidelines

Version 8 (FINAL)
April 2009

Guidelines for the management of basal cell carcinoma

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NICE guidance update May 2010 allows:

• Management of low-risk BCCs in the community by
  – 1. GPs performing skin surgery within DES/LES
  – 2. Model 1 practitioners – GPwSI in dermatology and skin surgery
  – 3. Model 2 practitioners – outreach community skin cancer services provided by acute trusts and linked to LSMDT

• All other BCCs referred to LSMDT member
Low-risk BCC for DES/LES

• Patient:
  – 24 years or over
  – Not immunosuppressed or Gorlin’s Syndrome

• Lesion:
  – Below the clavicle
  – < 1cm clearly defined margins
  – Not recurrent or persistent following incomplete excision
  – Not morphoeic/infiltrative or basisquamous
  – Not located
    • Over important anatomical structures
    • Where primary closure difficult
    • In area where difficult excision or highly visible site which may give poor cosmetic result
Excision of BCC

• For BCC <2 cm diam
  – 3 mm clears 85% tumours
  – 4-5 mm clears 95%

• Larger, morphoeic or recurrent tumours require larger margins (or Moh’s)

• Little data regarding deep margin- to subcutaneous fat

Guidelines for the management of basal cell carcinoma
British Journal of Dermatology 2008; 159:35-48
Management of incompletely excised BCC

- Controversial
  - 40 – 60% do not recur
  - 7 – 55% re-excised specimens contained tumour

- Re-treat if
  - aggressive histological sub-type
  - deep margin involved
  - critical anatomical site
Moh’s micrographic surgery

- First described 1941
- Whole surgical margin examined intra-operatively
- High cure rate (>99%)
- Spares normal tissue
- Treatment of choice for morphoeic, infiltrative or recurrent BCCs at anatomically important sites
1. lesion excised, marked and mapped

2. sections examined

3. further excision at site of residual tumour

4. reconstruction
Baxter J M et al. BMJ 2012;345:bmj.e5342
Alternatives to excision

• Observation
• Curettage and cautery/electrodessication
• Cryotherapy
• 5-flurouracil (Efudix)
• Imiquimod (Aldara)
• Photodynamic therapy
• Radiotherapy
Curettage and Cautery

- Small nodular or superficial BCCs
- 2 cycles
- 92.3% 5 year cure rate
- Not suitable for high-risk or recurrent disease
Cryotherapy

- 2 x 30 second freeze/thaw cycles
- Local anaesthetic
- Several weeks to heal
- 15% recurrence rate
- Good cosmetic results but inferior to excisional surgery on head and neck
5-flurouracil (Efudix)

- Bd to affected area and 1cm surrounding normal skin up to 6 weeks
- Inflammation
- sBCC only
5% Imiquimod cream (Aldara)

- Superficial BCC
- 5 x per week for 6 weeks
- Marked inflammation, systemic symptoms
- Good cosmetic results
- Long term follow-up data limited
  - 20% recurrence at 2 years
• Proinflammatory
  – TLR 7 and 8 dendritic cells
  – adenosine pathway

• Apoptotic effect in tumour cells
Photodynamic Therapy (PDT)

- 5-amino-leavulinic acid (ALA) or methyl ester (MAL)
- Superficial BCC
- >95% clearance at 3 months
- Pain during illumination
- Several weeks to heal
- Better cosmetic outcome than cryotherapy
- 10 - 20% recurrence at 2 years
Radiotherapy

- Primary treatment or adjuvant
- Superficial RT, electron beam therapy, brachytherapy
- Better long term cosmetic results with fractionation
- Multiple hospital visits
- 5 year cure rate approx 90%
- Avoid upper eyelid, lower leg
Follow-up

• Complete excision low-risk BCC
  – Discharge with advice re risk of recurrence, further tumour development and UVR exposure
  – www.bad.org.uk

• Recurrent or multiple BCCs
  – Offer FU

• Incomplete excision or non-surgical treatment
  – Deep margin – further treatment
  – Peripheral margin – see at 3-4 months then 6 monthly for 3 years
Conclusions

- Different clinical appearance of subtypes of BCCs
  - Prediction of histological subtype
  - Risk of recurrence
  - Most appropriate treatment

- Treatment depends on patient, tumour and local arrangements/expertise

- Low-risk BCCs may be managed effectively in the community provided
  - Good clinical governance
  - Access to local MDT