Head & Neck
Lumps & Bumps

R S Allison
Department of Otolaryngology,
Head & Neck Surgery
Christchurch Hospital

August 2010
Neck Lumps:

Children
Neck Lumps - Children

Majority
- Lymphadenopathy
- Resolve +/- antibiotic

Minority
- Persist / enlarge

Neck lumps

Lateral

Midline
Lateral neck masses in children

- Duration?
- Change in size?
- Solid / cystic?
- Skin changes?

- Lymph nodes
  - Bacterial / viral
  - Non tuberculous mycobacterial
  - Other

- Branchial cleft cyst
- Lymphangioma
- Malignancy
Lateral neck masses - management

Solid
- antibiotics 2 weeks
- review 3 weeks
- refer? FNA?

Cystic
- refer? FNA?
Midline neck masses - children
(usually developmental)

• Duration?
• Position?
• Solid/cystic?
• Moves on swallowing?

- Thyroglossal duct cyst
- Submental node
- Dermoid cyst
- Plunging ranula
Midline neck masses - management

**Solid**
- antibiotics 2 weeks
- review 3 weeks
- refer? FNA?

**Cystic**
- ultrasound
- refer? FNA?
Neck Lumps: Adults
Neck Masses - Adult

Midline
- Thyroid
- Thyroglossal cyst

Lateral
- Node
  - Inflammatory
  - NEOPLASTIC
- Branchial cyst
- Other eg. neural / vascular tumour
- Normal variant
Midline Neck Masses - Adult

Thyroid nodule

- Duration?
- Obstructive symptoms?
  - dysphagia
  - airway obstruction
  - hoarseness
- Hyper / Hypothyroidism?
Thyroid Nodule

- Ultrasound – 30-50% all adults
- Palpation – 4-8% women
  – 1-2% men
- 5-10% malignant
  - Increased risk if <30 years
  - >60 years
  - male
Thyroid Nodule

- Multinodular goitre
- Solitary
  - cystic
  - solid - benign - follicular adenoma
    - Hurtle cell adenoma
    - malignant - papillary carcinoma
    - follicular carcinoma
    - medullary carcinoma
    - anaplastic carcinoma
Thyroid Nodule - Investigation

TSH – normal / ↑

- **FNA**
  - “malignant” → refer
  - “indeterminate” → repeat, refer?
  - “benign” – cosmetic/obstructive → refer
  - review 3/12

TSH – ↓

- **Radionuclide scan**
  - cold nodule → FNA
    - hot nodule → thyroid clinic
Lateral Neck Mass - Adult

- **Node**
  - inflammatory
  - bacterial / viral
  - **MALIGNANCY**
    - metastatic
    - primary

- **Branchial cyst**

- **Other** eg neural / vascular tumours

- **Normal variant** eg hyoid bone
carotid bulb
Malignant Neck Node

Head & Neck

- Rich lymphatic system
  - numerous lymphatic channels
  - high density of cervical nodes
- Cancer metastasises early
- Neck node ? Sole presenting symptom of malignancy
Enlarged Neck Node

• Probably malignant
• Probably metastatic SCC
• Probably primary in head & neck
Lateral Neck Mass - Management

History
- Associated symptoms eg.
  - mouth ulcer
  - dysphagia
  - hoarseness
  - otalgia

Examination
- Assess lump
- Upper aerodigestive tract

Investigations
- Routine bloods
- FNA
- CXR
- Refer
Salivary Gland Disorders
## Salivary Glands

<table>
<thead>
<tr>
<th>Major Glands</th>
<th>Minor Glands</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Parotid</td>
<td>• Mucosa</td>
</tr>
<tr>
<td>• Submandibular</td>
<td>• mouth/pharynx</td>
</tr>
<tr>
<td>• Sublingual</td>
<td>• esp. palate</td>
</tr>
</tbody>
</table>
Salivary Gland Function

500-1500mls/day

Parotid - serous saliva
- short duct
- stones uncommon - radiolucent

Submandibular - mucinous saliva
- long duct
- “uphill” flow
- stones common - radio-opaque
Parotid Swelling

Generalised

- local
- systemic

Disorder - Disease

Localised

(usually tumour)

- benign
- malignant
Parotid Swelling

Generalised

Local Disorder
- sialoadenitis +/- stones
  - acute
  - chronic
  - recurrent

Systemic Disease
- Sjogren’s
- sarcoidosis
- diabetes
- alcoholism
Parotid Gland Tumours

Localised swelling

Benign 60%
- pleomorphic adenoma
- Warthin’s tumour
- etc

Malignant 40%
- metastatic SCC
- adenocarcinoma
- mucoepidermoid ca
- etc
Management of Salivary Gland Disease

Sialadenitis

- **Acute**  - massage, hydration, ? sialagogues
  - ? bacterial - usually staph
  - ? stone
  - ? surgical drainage

- **Chronic / Recurrent**  - surgical removal gland?
Management of Salivary Gland Disease

Salivary Gland Tumours

- **FNA**
- **CT? / MRI?**
- **Submandibular** - whole gland removed
- **Parotid** - partial parotidectomy - facial n. preserved
  - if malignant - ? facial n. resected
Fine Needle Aspiration

Parotid / Thyroid / Neck masses

- Easy
- Cheap
- Low morbidity
- No risk of tumour seeding
- BUT ? Accuracy
Christchurch Hospital:

100 Parotid tumours

Benign
- 66
  - pleomorphic adenoma
  - Warthins

Malignant
- 34
  - metastatic SCC
  - mucoepidermoid ca

Pathologist in ENT Department – accuracy 86%

• BUT General Practice – accuracy LESS
If FNA not consistent with clinical

- ? D/W Pathologist
- ? Repeat FNA
- ? U/S guided FNA

If considering FNA

- Consider specialist opinion
Head & Neck Cancer
“Head and Neck”

- oral cavity
- pharynx
- larynx
- nose & sinuses
- salivary glands - parotid
  - submandibular
  - minor
- skin - invasive
  - metastatic
- thyroid
Head & Neck Cancers

5-8% of all cancers

180 – 200 new cases/year in Christchurch
Head & Neck Cancer

Histology

- squamous cell cancer
- others
  - adenocarcinoma
  - adenoid cystic carcinoma
  - mucoepidermoid cancer
  - melanoma
  - sarcoma
  etc
Head & Neck Cancer

Risk factors:

• smoking - tobacco
  - roll your own
  - filterless
  - filtered
  - marijuana

• alcohol - spirits
  - beer
  (wine)

• hardwoods

• nitrosamines - salted fish
Head & Neck SCC

Neck - very rich lymphatic supply
- 150-200 lymph nodes

H&N SCC - metastasises early to neck nodes

Enlarged neck node - may be only symptom
- need to search for primary tumour
Head & Neck SCC Assessment

- History and examination
- Examination - biopsy under anaesthesia
- FNA neck nodes
- CT scan
  - primary site
  - neck
  - chest/abdomen
- MRI
- PET
- OPG

→ TNM stage
Head & Neck SCC
Treatment Options

Management - Multidisciplinary
- Radiotherapist
- Surgeon
- Support Personnel
  - dentist / oral surgeon
  - speech therapist
  - dietician
  - social worker
  etc
Head & Neck SCC
Treatment Options

**Small tumours**
- single modality
  - eg. oral cavity
  - larynx

**Large tumours**
- combined modality
  - eg.
  - surgery + post-op radiotherapy
  - chemoradiation
Head & Neck Cancer Conclusion

• Relatively common but variety of sites
• Range of symptoms – similar to benign disease
• Usually diagnosed on thorough clinical examination
• Treatment - multidisciplinary
  - usually curative
Head & Neck Tumours- Summary

Thyroid / parotid / neck mass:
FNA useful - ? Interpretation

Hoarseness
Dysphagia
Oral ulcer - More than 3 weeks
Local pain - Consider referral
NECK LUMP