

# Examining a Lump

## ***Learning Objectives***

By the end of the third year ...

- you should be able to systematically examine and accurately describe any lump
- you should be able to attempt a general diagnosis regarding probable tissue of origin (Reticuloendothelial, general tissues of body – fat, muscle, nerve, etc or structures peculiar to that location – thyroid, parotid, spleen etc) and pathological process responsible (normal, inflammatory, neoplastic, hyperplastic, metabolic, congenital, traumatic etc)
- You should specifically be able to recognise and diagnose the following conditions: Lipoma, Hernia, Sebaceous Cyst & Abscess, Thyroglossal Cyst, Thyroid Lumps, Lymph Nodes, Various Breast Lumps.

## ***Preparation***

- Ask the patient to indicate the position of the lump(s) and any previous lumps
- Explain the procedure to the patient
- Ensure that exposure is adequate, including lymphatic drainage. Ensure patients dignity
- Ask the patient if there is any tenderness
- Ask about any recent change in the lump

## ***Procedure***

This is divided into Look, Feel, Move (plane of attachment), Specific tests, and Regional Lymph nodes

### **1. Look (observation)**

- Location/position,
- Contour (regular or irregular),
- Pulsation (aneurism or high blood flow),
- Colour of skin (red, pigmented, etc)
- Abnormalities in skin (peau d'orange)
- Abnormal vessels

### **2. Feel (palpation)**

- Cough impulse
- Consistency (Soft, firm, hard, rubbery; uniform, varied, lobulated)
- Emptying
- Fluctuation
- Position (measured from a landmark)
- Surface (smooth, rough, irregular)
- Shape
- Size (tape measure)
- Tenderness
- Temperature
- Thrill or pulsation

### **3. Move (plane of attachment)**

- Skin Tethering (attempt to pick up a fold of skin over the swelling and compare with other side)
- Deeper structures (attempt to move the swelling in different planes relative to surrounding tissues)
- Muscles and tendons (palpate the swelling whilst asking the patient to use the relevant muscle)

### **4. Specific Tests**

- Transillumination (if you suspect the mass is filled with clear fluid, eg a hydrocoele)
- Auscultation (for bruits or bowel sounds)

### **5. Regional Lymph Nodes**

- You must be aware of the main routes of lymphatic drainage and the relevant regional lymph nodes. There are specific ways of examining different groups of lymph nodes, these are covered well in Macleods Clinical Examination (see refs)

## ***Interpretation***

Clearly there are a lot of points to remember. You will find various mnemonics. I have tried to categorise them in five simple domains. Try and work through each domain thinking about the possible tissues involved and pathological processes. These will lead you to a diagnosis and a logical way of presenting your findings

For example:

“Mrs Jones presents with a longstanding slowly enlarging solitary lump on her back. On examination there was a single, soft swelling 4 cm to the right of the spinous process of L1. It measured 3 cm by 4 cm, and the overlying skin looked normal. It was non tender and felt soft and lobulated, the edges were well demarked. There was no tethering to skin nor to the underlying muscle. There was no associated lymphadenopathy. In summary, I feel that these features are consistent with a lipoma.”

“Mr Phillips presents with a month history of pain and swelling at the site of an old orthopaedic plate. On examination there was a single swelling over the Anterior aspect of the distal right tibia, 15 cm from the upper border of the medial malleolus. The skin was red, hot and tender to touch. In places the swelling felt hard, in others fluctuant, the borders were poorly defined and there was considerable surrounding erythema and tenderness. The swelling was not tethered to the skin, but did appear confluent with the tibia itself. I feel that these signs point to inflammation and infection in the tibia at the site of a foreign body, consistent with a diagnosis of Chronic Osteomyelitis.”

## ***References and further reading***

### **Examination of a lump**

This is poorly covered in many of the clinical skills books. I found the following texts useful in writing this brief:

- An introduction to clinical examination, Michael J Ford & Munro, Seventh Ed, p 122
- Macleod's Clinical Examination, 10<sup>th</sup> Ed pp56-58 and 58-61 for examination of lymph nodes
- Acknowledgment also needs to be given to Mark Chaput de Saintange who produced the first version of this skills sheet for CMCS 2001

### **Pathology and anatomy**

- General and systematic pathology, J.C.E. Underwood
- Regional anatomy Illustrated, Smith et al
- Concise system of orthopaedics and fractures, Apley & Solomon
- Medicine, Souhami & Moxham.

### ***Authorship***

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Dr Dason Evans

CCLSU, room 2.32 Robin Brook Centre

Barts and the London, Queen Mary School of Medicine and Dentistry

[dason@dason.info](mailto:dason@dason.info)

Comments and suggestions welcome