

EXAMINATION OF A SWELLING

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Meaning

- Swelling denotes enlargement or protuberance in any part of the body.
- It can be called as “Mass” – abd swelling or “Lump” – breast swelling.
- Swelling in the skin means an eminence or elevation.

History

- Chief complaints :

- Swelling in any part of the body.
- Associated with or without pain.

- History of present illness :

1. Duration -

- It is important to note the duration.

2. Mode of onset & progress –

- It is very important so as to know whether it started after trauma or spontaneously.

History - contd

- The rate of progress - whether rapid or slow.
- Certain swellings may be stationary – status quo.
- Side and exact site should be asked.
- Size and shape - at the time of onset should be asked.

3. Pain –

- Detailed history related to pain should be noted.

History - contd

4. Fever –

- Nature of fever with the swelling should be asked .

5. Other lumps / swellings –

- Any other swellings should be clarified.

6. Other features –

- Secondary changes
- Movements
- Loss of wt & appetite

History - contd

- **Past history :**
 - History of surgery in the past at the same site or at different site has to be asked for.
- **Personal history :**
 - Habit of smoking / alcohol consumption or tobacco chewing.
 - Dietary habits and suffering from any chronic diseases and their treatment to be asked.

History - contd

- **Family history :**
 - Family history suggestive of similar swellings should be enquired.
- **Treatment history :**
 - As the patient has received any treatment for the present swelling and nature of treatment & its duration should be clarified.

Inspection

- Examination of swellings starts with inspection.

“ REMEMBER NOT TO TOUCH THE PATIENT

DURING INSPECTION ”

- Typically remember first the
“ 6 – S ” in the method of inspection.

1. Site

- Exact anatomical location - noted
- Relation – bony pt/ surface landmark
- Eg :
 - Post Auricular Dermoid – Behind ear
 - Ext. Angular Dermoid – Lat. End of eye brow
 - Meningocele – Over the back in midline



*Image via Bing



*Image via Bing

2. Size

- Vertical or Horizontal dimension - assessed
- Noted in cms
- Eg :
- Ext. Angular Dermoid – Lat. End of eye brow.



3. Shape

- Oval/globular/spherical pear or irregular – diffuse or localised
- Eg :
- Abscess – Over the back



4. Surface

- Smooth / nodular / lobular or irregular
- Eg :
 - Smooth – Seb. cyst
 - Nodular – MNG- Thyroid



5. Skin

- Tense, glossy with prominent veins
- Red edematous
- Pigmentation/ulceration/ fungation / discharge
- Scar & nature of healing
- Eg:
 - Abscess – Back
 - Abd.wall abscess



6. Surrounding area

- Changes -
pigmentation/edema
wasting, discoloration
- Eg :
 - Abscess – Rt. foot
 - Ca. Breast



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7. Others

- Number – single multiple
- Colour
- Edges / Margins
- Extent
- Visible pulsations
- Visible cough impulse
- Movements
- Joints – above / below



Palpation

- Be Gentle & do not hurt the patient
- Methodical, follow a definite order
- To define anatomically
- To find out – nature of content

1. Temperature

- Check in the beginning itself
- Best – back of hand
- Increased in -
 - Inflammation / Infection
 - Tumours with \uparrow vascularity

2. Tenderness

- Pain due to pressure exerted over the swelling
- Palpate gently – observe the face of patient
- Features of :
 - Inflammatory conditions
 - Swellings related to nerves

3. Inspectory findings

- Size, Shape, Surface, Edge and Extent – confirm with palpation & co-relate both.
- Note the third dimension depth which could not be exactly determined by inspection.

4. Consistency

- Nature or feel of the swelling
- Look for - Moulding
- Look for this sign – Soft & Cystic swellings
- Press a finger for 1-2mts & release it. If swelling remains indented it indicates the content is a pulltaceous or putty – like material.
- Uniform :
 - Soft: lip/ear lobule
 - Firm: tip of nose
 - Hard: forehead
- Variable :

5. Fluctuation

- Transmission of impulse in 2 directions at right angle to each other.
- Implies – fluid or gas
- Pseudo-fluctuation
- Cross-fluctuation
- **Eliciting method –**
 - First fix the swelling.
 - Keep 2 index fingers on opposite poles.
 - When one finger is pressed the finger at opposite end feels the impulse & passively lifted up.
 - Repeat the manoeuvre in a plane at right angles to the 1st one.
 - If impulse is felt in both planes it is a + fluctuation test.

Fluctuation - contd

- Pagets's test - $< 2\text{cm}$
- The margins of swellings is fixed using thumb & ring fingers.
- Using index finger summit or centre of swelling is pressed to feel the displacement of fluid.
- **Principles to be used –**
 - Always perform in 2 directions at right angles to each other.
 - Two fingers should be kept as far apart as possible.
 - Freely mobile swellings should be fixed first .
 - Very large swellings more than one finger should be used.

6. Translucency

- Transmission of light through a swelling.
- Positive in swellings – Clear fluid & thin transparent walls.
- No transillumination - wall is thick, or turbid fluid [Blood, pus, lymph]
- Dark room with transilluminoscope.



7. Reducibility

- Pt is asked to relax first.
- Swelling is pressed from all sides uniformly.
- Reducible swellings decreases in size or completely disappear.
- It reappears only by straining, coughing. It involves displacement of viscera to an adjoining cavity.

1. Hernia
2. Meningocele
3. Varicocele
4. Saphena varix

8. Compressibility

▪ Swelling on pressure reduces in size only partially but will not disappear completely.

▪ Swelling regains its original form on releasing the pressure.

▪ Contents are not actually displaced.

1. Haemangiomas

2. Lymphangiomas

9. Pulsatility

- Swelling may be pulsatile – It raises with each beat.
- 2 types of pulsations - seen.
- Two fingers are placed over the swelling and finger movements are noted.
 1. Transmitted pulsation – Fingers are only raised but not separated.
 2. Expansile pulsation – Fingers are raised & separated.

10. Fixity to skin

- Skin is lifted up over different parts of the swelling – cannot be lifted if fixed to skin.
- Skin is made to move over the swelling – the skin will not move if it is fixed to skin.

11. Mobility/Plane-swelling

- **Mobility** – swelling can be moved in relation to underlying structures.
- **Plane** – co-relates to the probable site of origin or its relationship to deep fascia.

12. Relationship to structures

▪ Muscle –

- Sub. Cut. Tissue :
more prominent &
less mobile.
- From muscle : fixed &
diminished
- Deep to muscle :
disappears & difficult
to palpate

▪ Tendon –

- Moves with the tendon
& fixed

▪ Vessels & nerves –

- Moves little extent at
rt angles to axis.

▪ Bone –

- Fixed

Percussion

- Limited value in swellings
- Not needed
- To find out content or elicit tenderness

Auscultation

- Look for any bruit over pulsatile swellings.
- Machinery murmur – aneurysmal varix

Other examinations

- Joints above & below the swelling – movements.
- Look for pressure effects.
- Regional lymph nodes – enlargement
- Systemic examination – related to respiratory / skeletal & abdomen – suspecting malignancy.



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