MEDICAL EDUCATION RESOURCE

Skin and Fasciae of the Back and its Dissection

Skin and Fasciae of the Back

Skin

- **Thick, coarse, and pigmented** (especially in upper back).
- Rich in **sebaceous glands** ? prone to acne, sebaceous cysts, furuncles.
- **Cutaneous innervation**:
  - Supplied by **posterior (dorsal) rami** of spinal nerves.
  - Each nerve supplies a **segmental strip (dermatome)**.
- Clinical:
  - **Shingles (Herpes zoster)** affects dorsal root ganglion ? vesicular eruption along dermatome.
  - **Referred pain** can localize to back dermatomes.

Fasciae

1. Superficial Fascia

- Thin, contains fat, vessels, and cutaneous nerves.
- Loosely attached ? allows skin mobility.

2. Deep Fascia

- Dense fibrous sheath investing muscles.
- In lumbar region ? thickened to form **thoracolumbar fascia**, which has:
  - Posterior layer ? attached to spinous processes.
  - Middle layer ? attached to transverse processes.
  - Anterior layer ? covers quadratus lumborum.
- Provides strong attachment for **latissimus dorsi, internal oblique, transversus abdominis**.
- Clinical:
  - **Thoracolumbar fascia** transmits mechanical stresses between upper limb and pelvis.
  - Infections may spread along fascial planes.

Dissection of Back

Step 1: Skin Incision

- Midline incision from external occipital protuberance ? coccyx.

- Transverse incisions along scapular spine and iliac crest.
- Reflect skin laterally to expose superficial fascia.

Step 2: Expose Superficial Fascia

- Remove superficial fascia to reveal **cutaneous nerves and vessels**.
- Identify posterior branches of spinal nerves emerging segmentally.

Step 3: Expose Deep Fascia

- Carefully clear deep fascia to outline trapezius and latissimus dorsi.
- Observe continuity of deep fascia with **nuchal ligament (cervical region)** and **thoracolumbar fascia (lumbar region)**.

Step 4: Clinical Demonstrations

- Note thickness of skin in upper back (common site for sebaceous cysts).
- Show distribution of cutaneous nerves (dermatomes).
- Demonstrate thoracolumbar fascia as an important structure linking limb and trunk muscles.