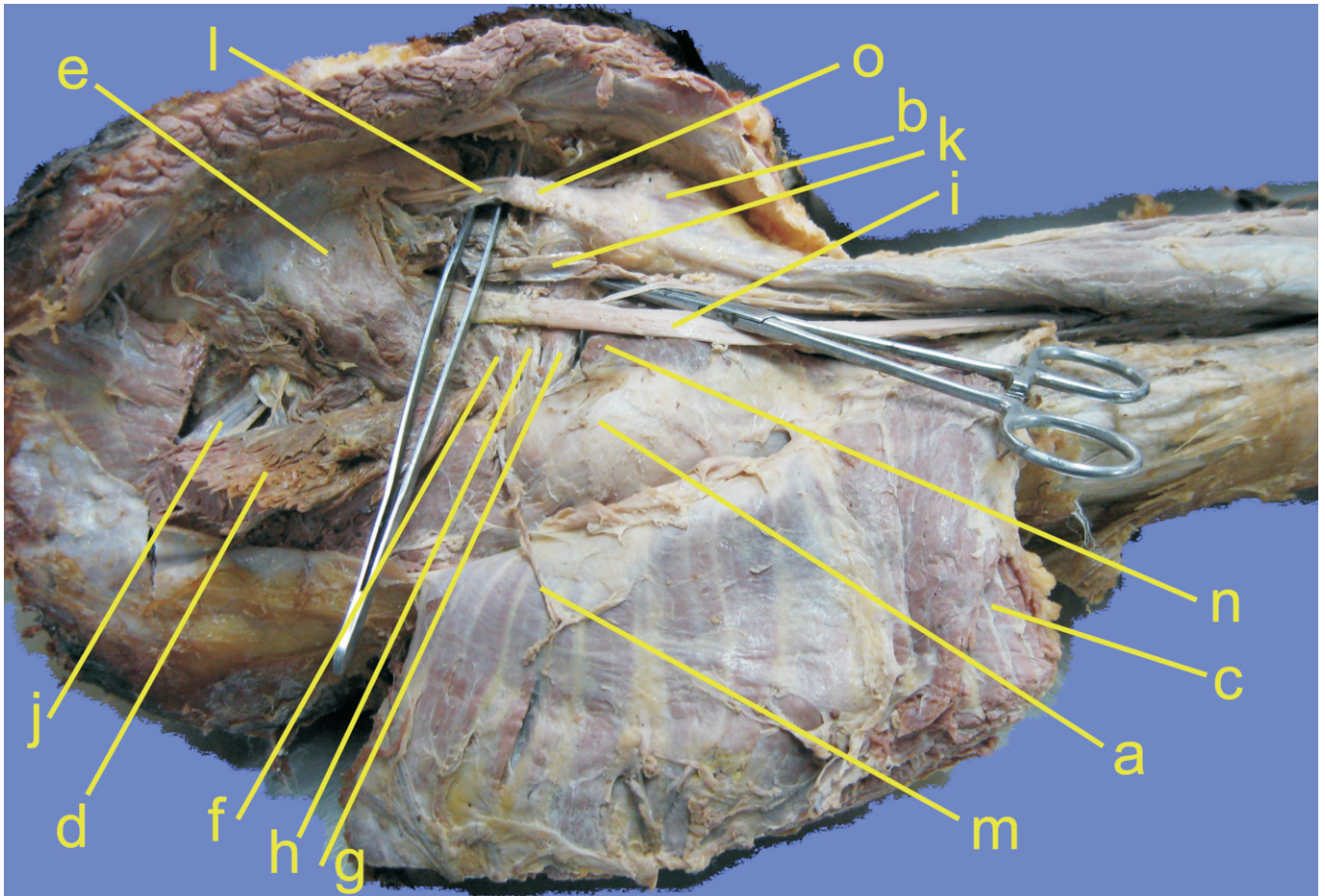


## Pictorial CME

Regional Anatomy at a Glance  
Shilpi Gupta Dixit, Veena Bharihoke



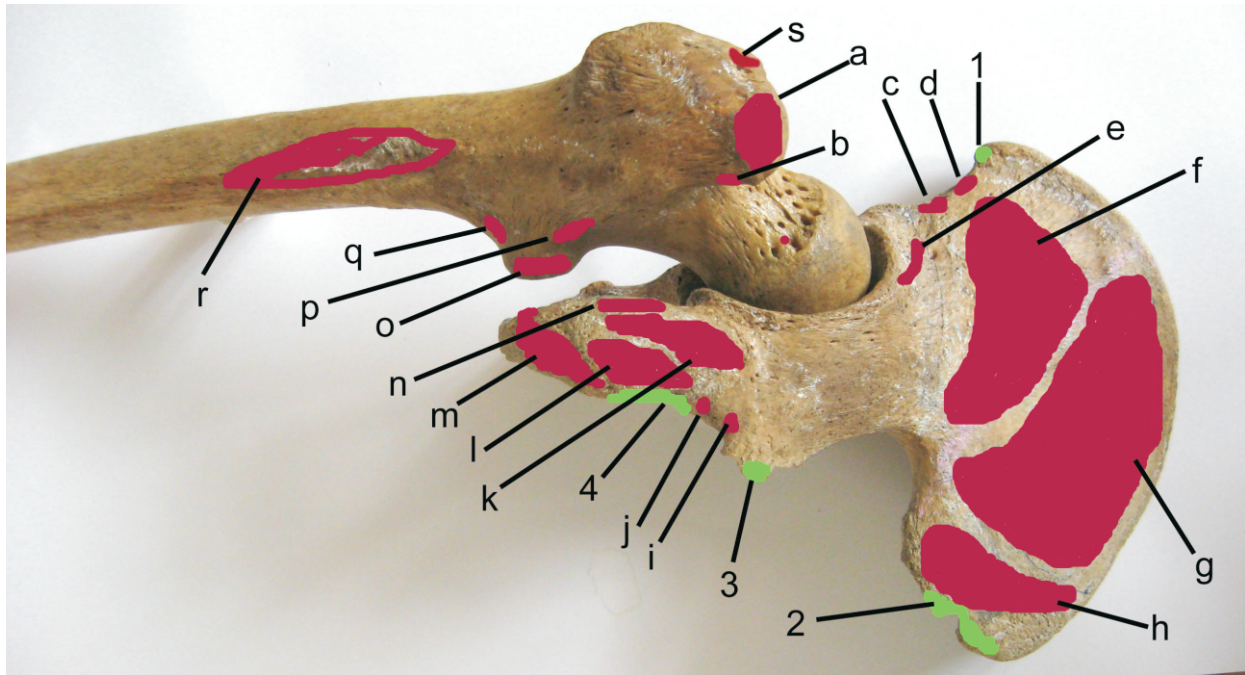
**Figure1**  
Identify the region  
Identify the marked structures

*Answer on page 61*

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## Pictorial CME



**Figure 2**  
Identify the bones; Identify the structures attached to the areas marked

*Answer on page 61*

### Answer to Clinico-Radiological Quiz

*From page 55*

X-ray of bilateral hands showing peri-articular osteoporosis, a characteristic feature of Rheumatoid arthritis. The small arrow head shows bony erosion.

#### Key messages-

1. Periarticular osteopenia in appendicular bones occurs early in the course of rheumatoid arthritis and is one of the earliest radiological signs of rheumatoid arthritis
2. Bilateral symmetrical, hand joint involvement, small joints involvement, with early morning stiffness, positive Rheumatoid factor and supportive radiological evidence are the characteristic features of Rheumatoid arthritis.
3. Rheumatoid arthritis is associated with both generalised osteoporosis as well as localised peri-articular osteoporosis. Osteoporosis in Rheumatoid arthritis results from increase in bone resorption. However, use of glucocorticoids for treatment also results in decreased bone formation. Disease activity, immobility, corticosteroid use and menopausal status are important determinants of osteoporosis in rheumatoid arthritis.
4. Localised peri-articular osteoporosis can also be observed in cases of other inflammatory joint disease, but then it is not symmetrical and characteristically will not involve the small joints of the hand as in this case of Rheumatoid arthritis.

besides conserving on paper, which is a scarce resource.

Checklist for attachments to the e-mail-

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E mail: editor@ijms.in

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### Answer to Regional Anatomy at a Glance

*From page 56, 57*

Figure 1 - The area is gluteal region. The structures are as follows:

- a) Greater trochanter
- b) Ischial tuberosity
- c) Gluteus maximus
- d) Gluteal medius
- e) Piriformis
- f) Superior Gemelli
- g) Inferior Gemelli
- h) Tendon of obturator internus
- i) Sciatic nerve
- j) Superior gluteal nerve and vessels
- k) Inferior gluteal nerve and vessels
- l) PIN structures—from MEDIAL to LATERAL --  
Pudendal nerve, internal pudendal vessels and nerve to obturator internus
- m) Inferior gluteal nerve
- n) Quadratus femoris
- o) Sacrotuberous ligament

Figure 2 - The figure is showing posterior aspect of both hip bone and femur.

- a) Greater trochanter
- a, g) Gluteus medius
- b) Obturator externus
- c) Straight head of rectus femoris
- d) Sartorius
- e) Reflected head of rectus femoris
- f) Gluteus minimus
- h, r) Gluteus maximus
- i) Superior gemellus
- j) Inferior gemellus
- k) Semimembranosus
- l) Semitendinosus & long head of biceps femoris
- m) Adductor magnus
- n) Quadratus femoris
- o) Psoas major
- p) Quadratus femoris
- q) Iliacus
- s) Piriformis
- 1) Inguinal ligament
- 2, 4) Sacrotuberous ligament
- 3) Sacrospinous ligament

### Key points to remember

1. Gluteus medius and minimus muscles of opposite side steady the pelvis when the foot is raised above the ground during walking. They are also abductors of hip joint, supplied by superior gluteal nerve & vessels
2. Paralysis of these muscles makes pelvis unsteady- Trendelenburg's sign becomes positive. Test may also be positive if head of femur is dislocated or in fracture of neck and shaft of femur.
3. If the muscles of right side are paralysed, and foot of left side is raised off the ground, then pelvis of left side sags, and vice versa.
4. Gluteus maximus is powerful extensor of hip joint, active while standing from sitting position and climbing stairs, supplied by inferior gluteal nerve and vessels.
5. Other small muscles in the gluteal region cause lateral rotation of hip joint.