

SACRAL PLEXUS , SCIATIC , PCNT



BY

DR ABULMAATY MOHAMED
ASSISTANT PROFESSOR
ANATOMY & EMBRYOLOGY
MUTAH UNIVERSITY

SACRAL PLEXUS

Site: - in front of piriformis

Formation:-

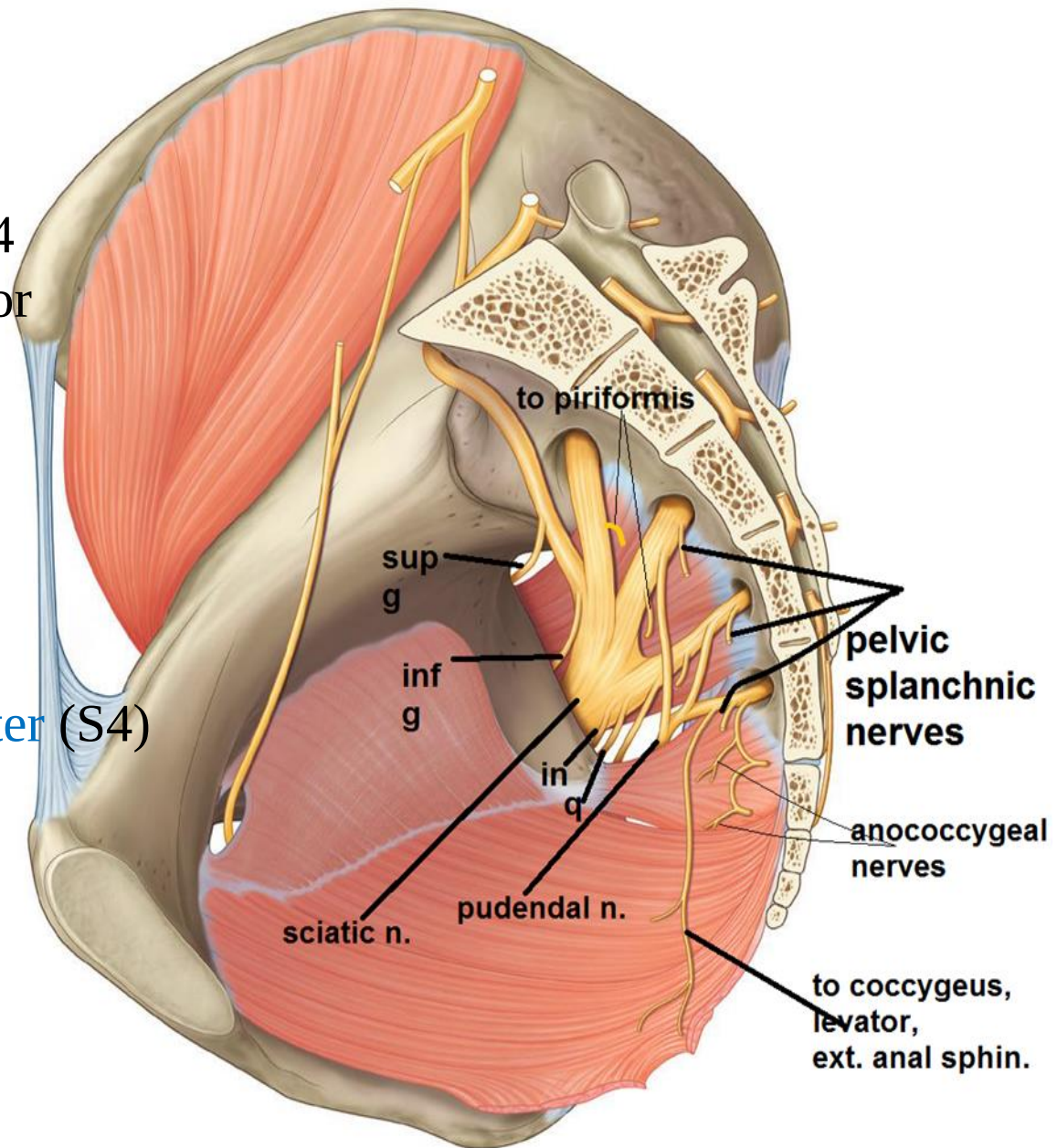
Ventral rami of L.4,5, S.1,2,3,4
each ramus divides into anterior
& posterior divisions

Branches:-

Nerve to piriformis (S1,2)

Nerves to Coccygeus,
levator ani,
external anal sphincter (S4)

Pelvic splanchnic nerve
(Parasympathetic):-
from S2,3,4



SACRAL PLEXUS

Branches:-

N. to quadratus femoris (L4,5 S1)

N. to obturator internus (L5 S1,2)

Superior gluteal n. (L4,5 S1)

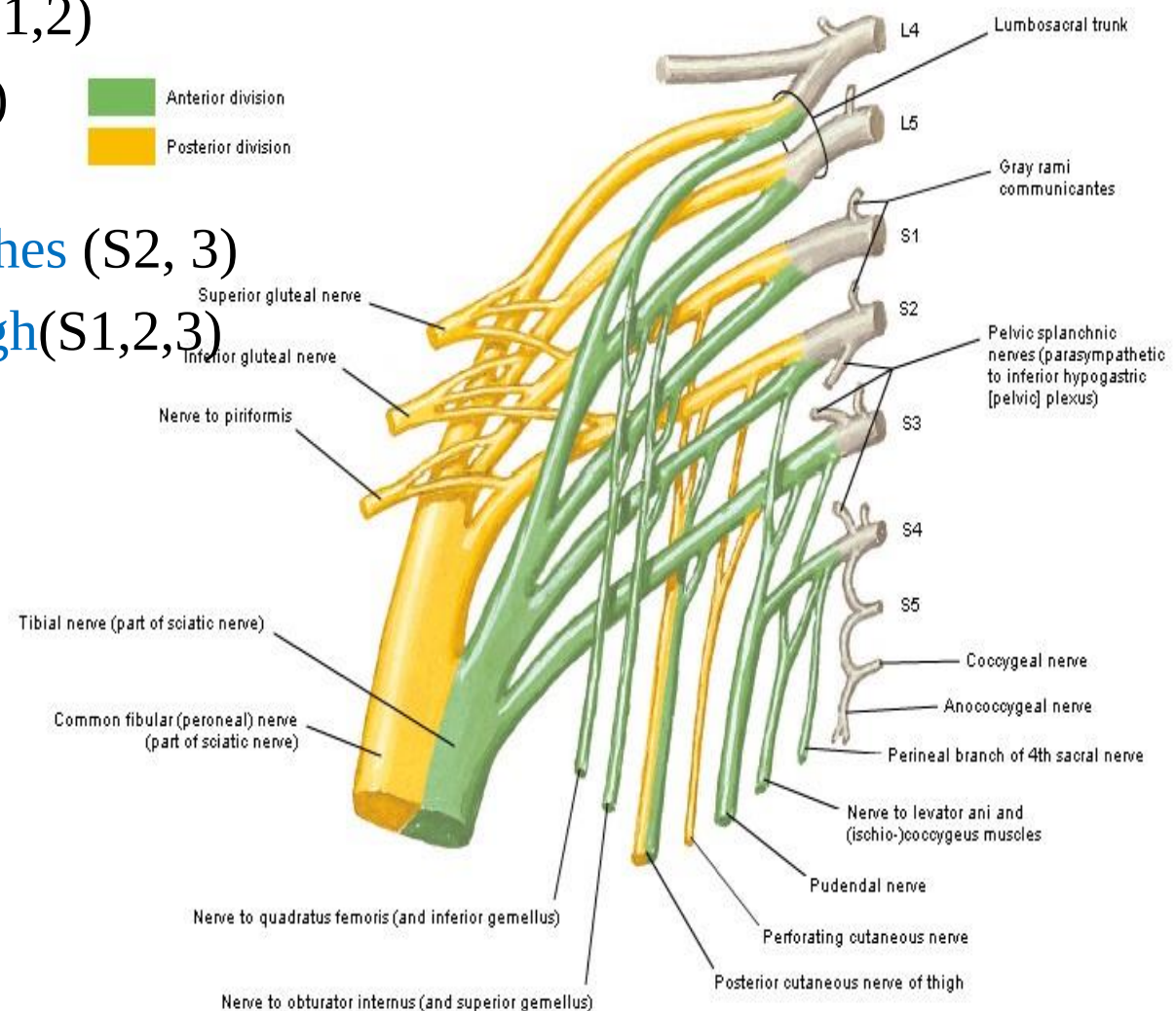
Inferior gluteal n. (L5, S1,2)

Perforating cutaneous branches (S2, 3)

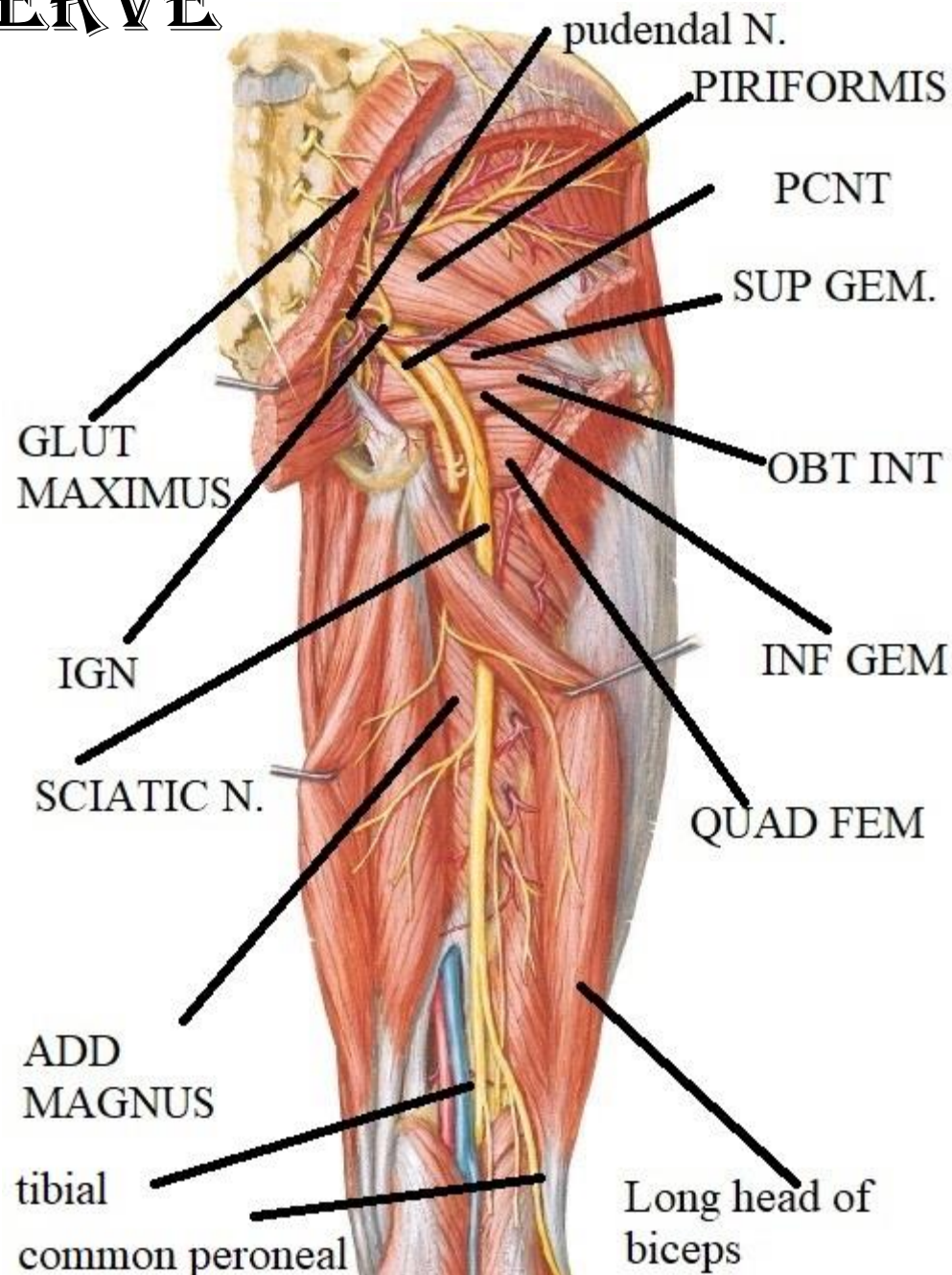
Post. cutaneous nerve of thigh (S1,2,3)

Sciatic n. L4, 5 S1, 2, 3

Pudendal n. S2, 3, 4



SCIATIC NERVE



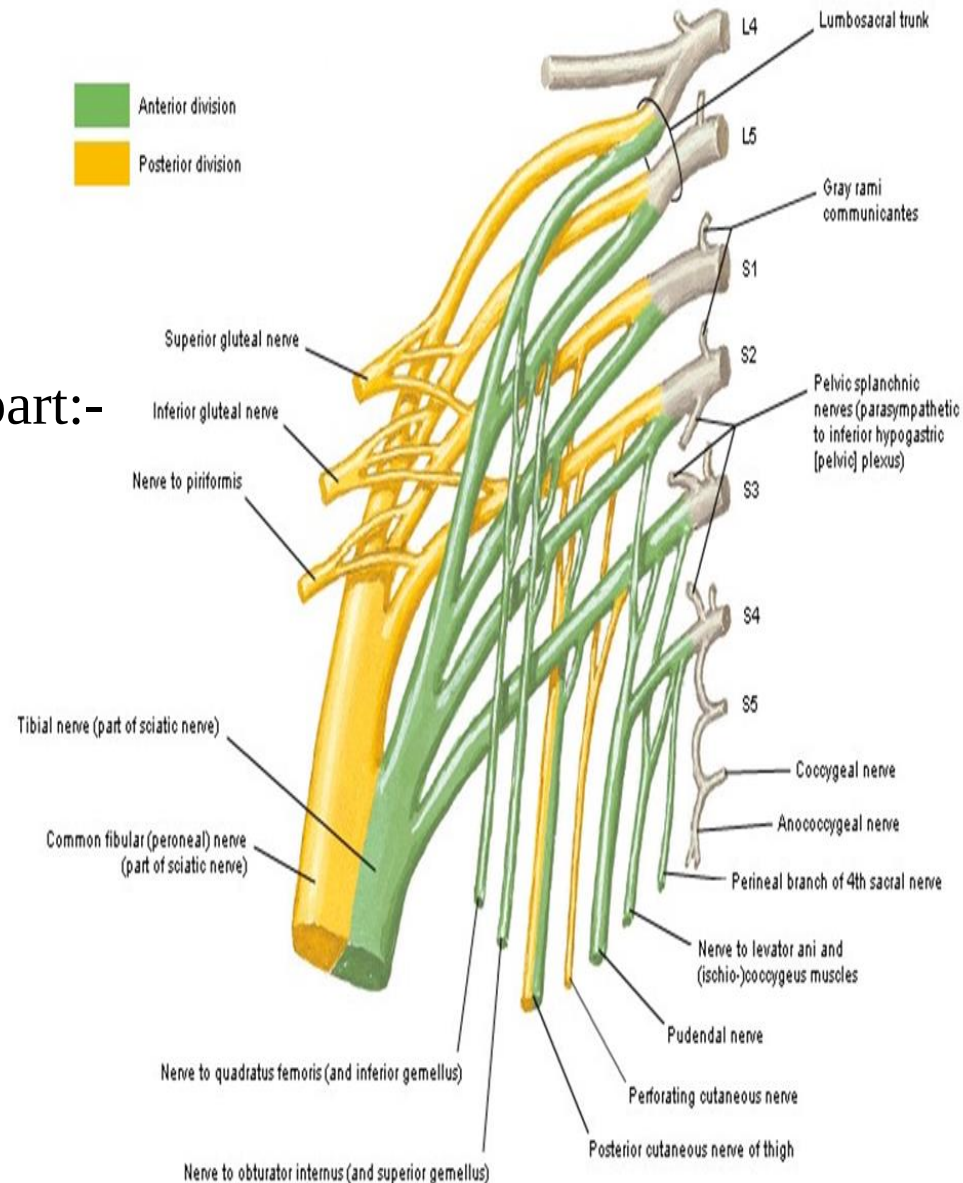
SCIATIC NERVE

the thickest n. in the body

O.: sacral plexus (L4, 5 & S1, 2, 3)

it has 2 parts in a common sheath :

- tibial (medial popliteal) part:-
L 4, 5 , S 1 , 2 , 3
- common peroneal (lateral popliteal) part:-
L4,5 S 1,2



SCIATIC NERVE

C.:

leaves pelvis through GSF below piriformis
(lateral to inferior gluteal n. & v. ,
pudendal nerve , internal pudendal vessels)

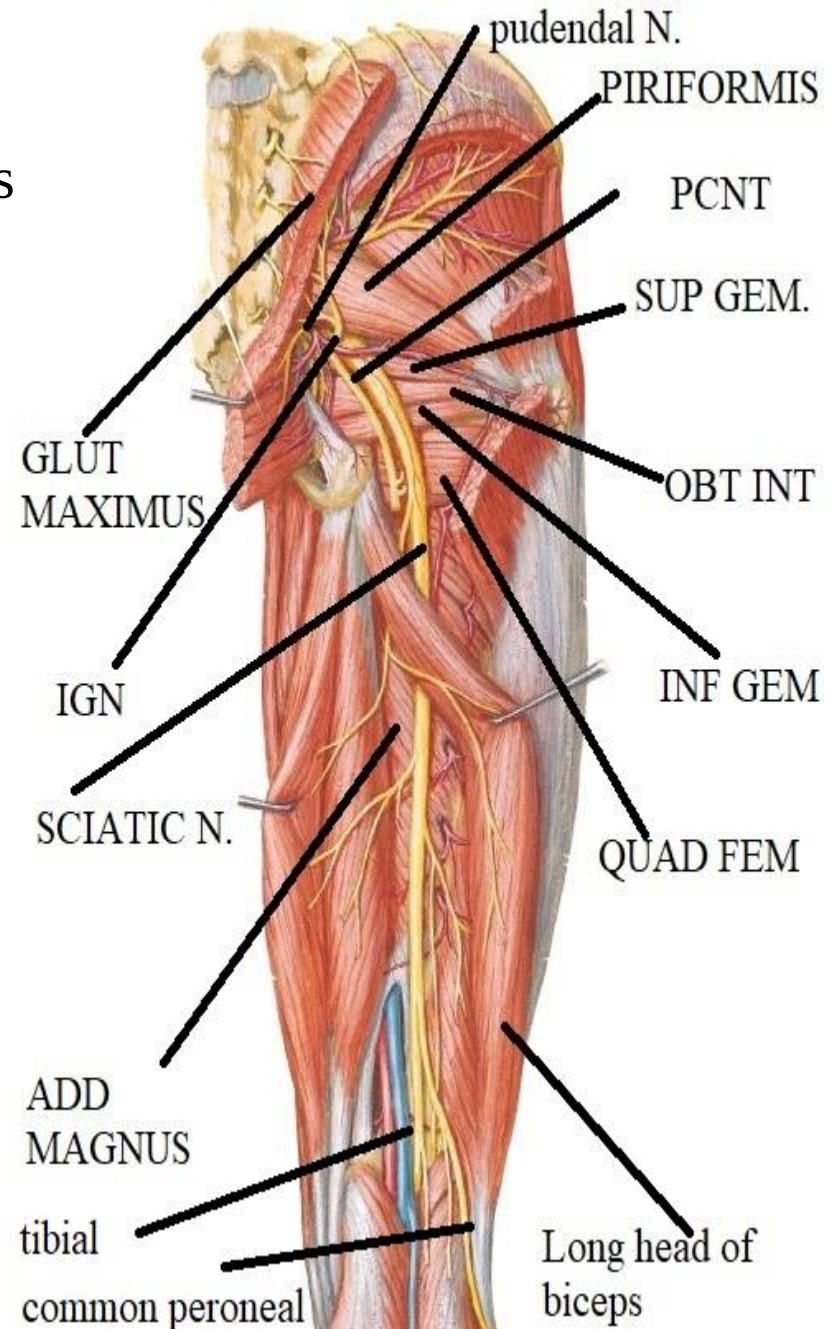
in gluteal region :-

it passes downwards & laterally
to point midway () ischial tuberosity
& greater trochanter to enter back of thigh

in back of thigh:- descend vertically
in midline of back of thigh.

ends proximal to popliteal fossa

divide into tibial & common peroneal



SCIATIC NERVE

C.:

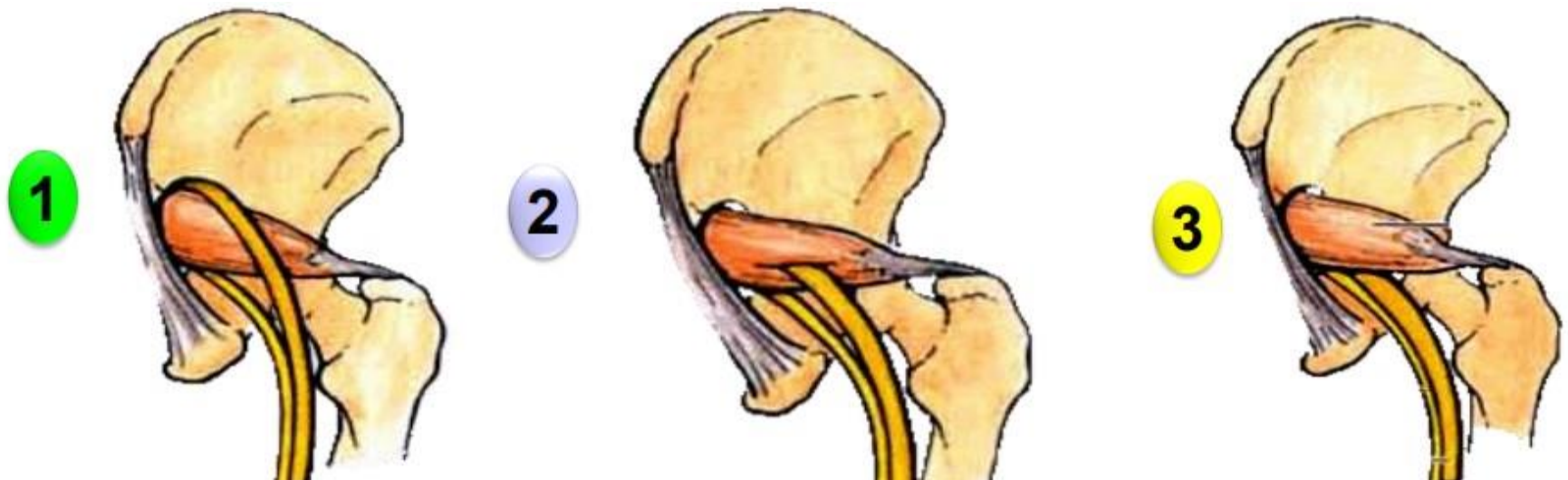
Variation of the sciatic nerve:

- The nerve may leave the pelvis as two separate parts:

a- **Tibial nerve** passes below the piriformis muscle and takes course of the sciatic nerve.

b- **Common peroneal nerve** passes either

- 1- Above the piriformis muscle.
- 2- Through the piriformis muscle.
- 3- Below the piriformis muscle..



SCIATIC NERVE

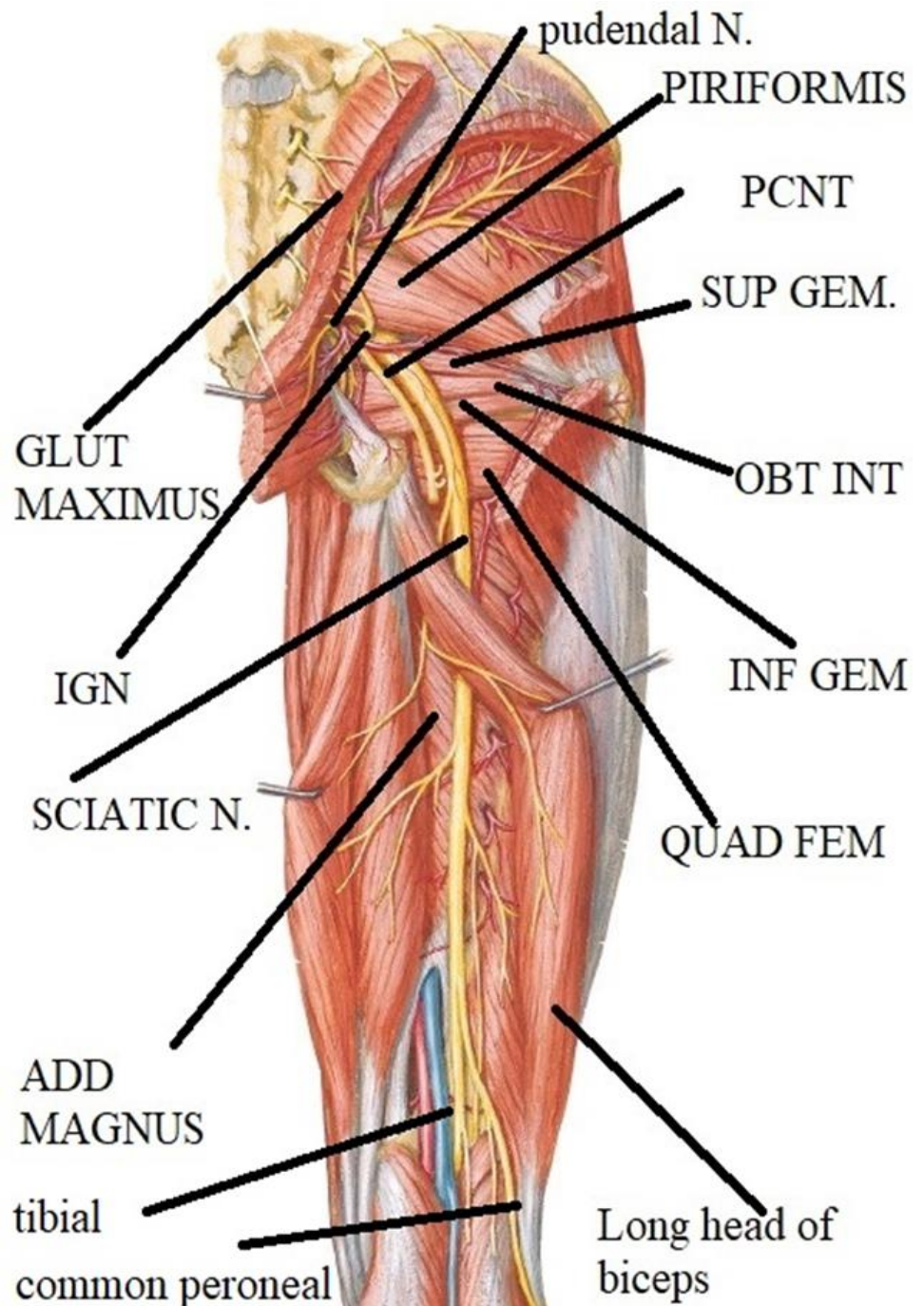
Relations :

Superficial (posterior):

- post. cutaneous of thigh
- gluteus maximus
- long head of biceps

Deep (anterior)

- back of ischium
- superior gemellus
- obturator internus
- inferior gemellus
- quadratus femoris
- n. to quadratus femoris
- adductor magnus



SCIATIC NERVE

Branches : no branches in gluteal region

Muscular branches

From tibial part

- adductor magnus (ischial head)
- semimembranosus
- semitendinosus
- long head of biceps

From common peroneal part

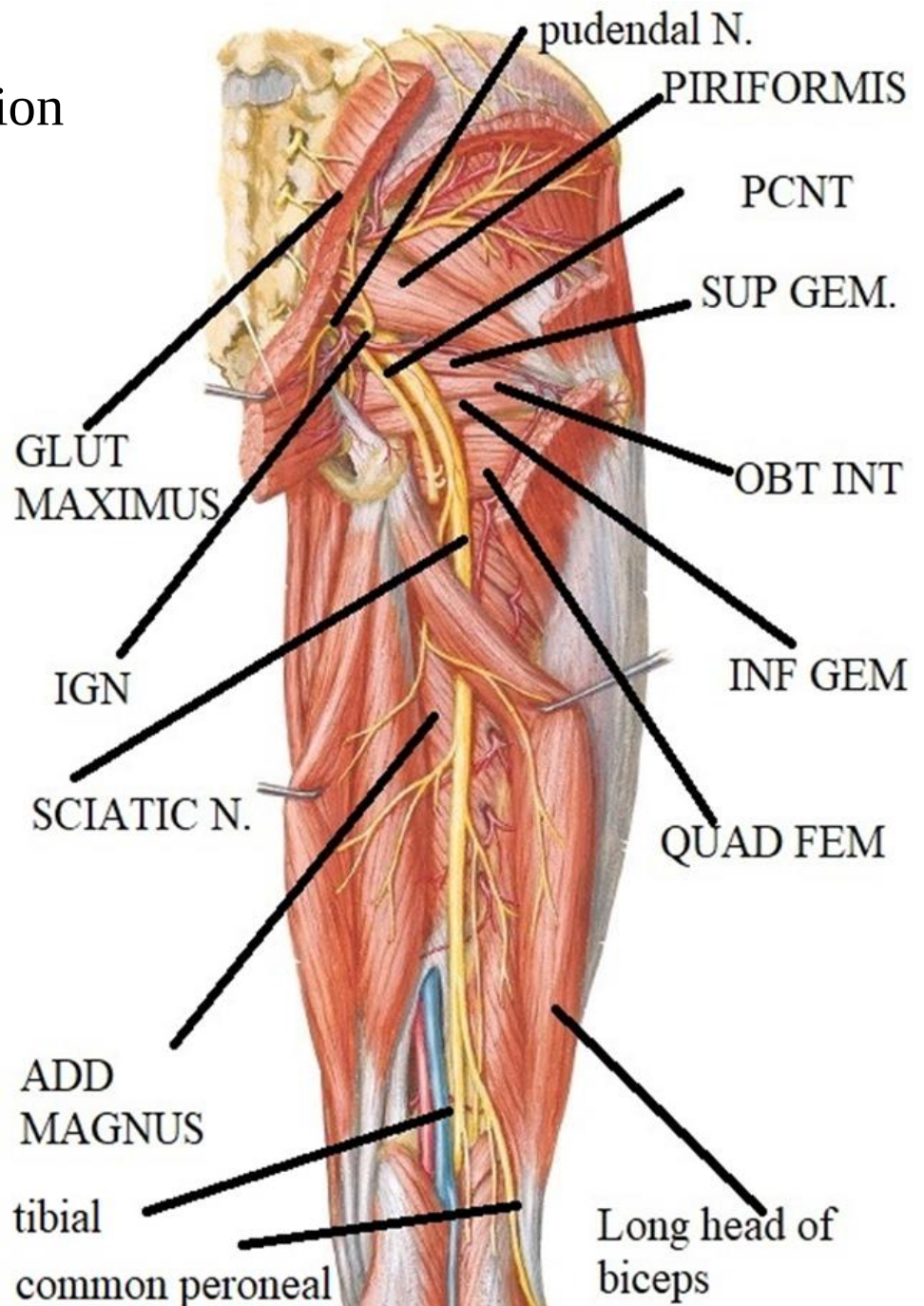
Short head of biceps

Articular branch

hip joint

Terminal branches

- tibial
- common peroneal

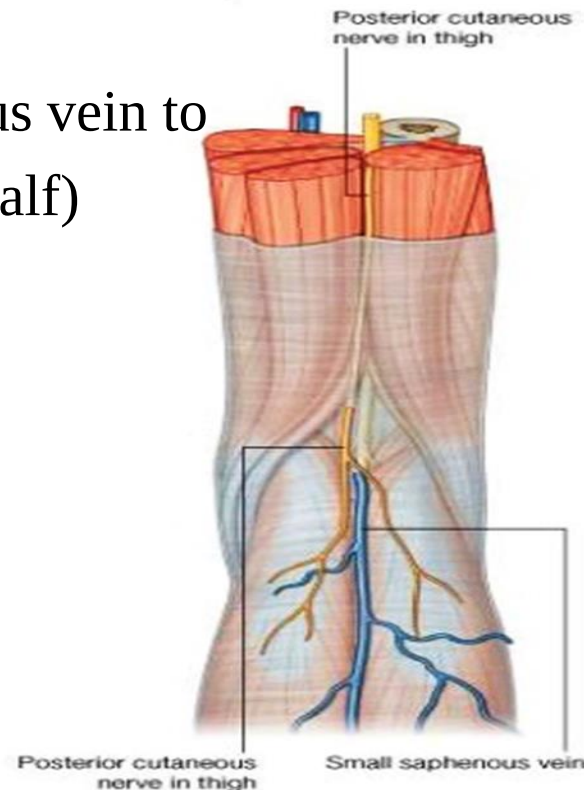
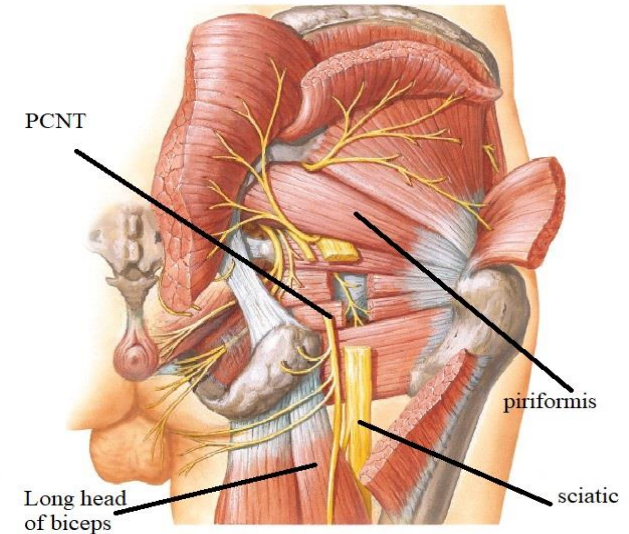


POSTERIOR CUTANEOUS NERVE OF THIGH

O.: from sacral plexus

C & R :

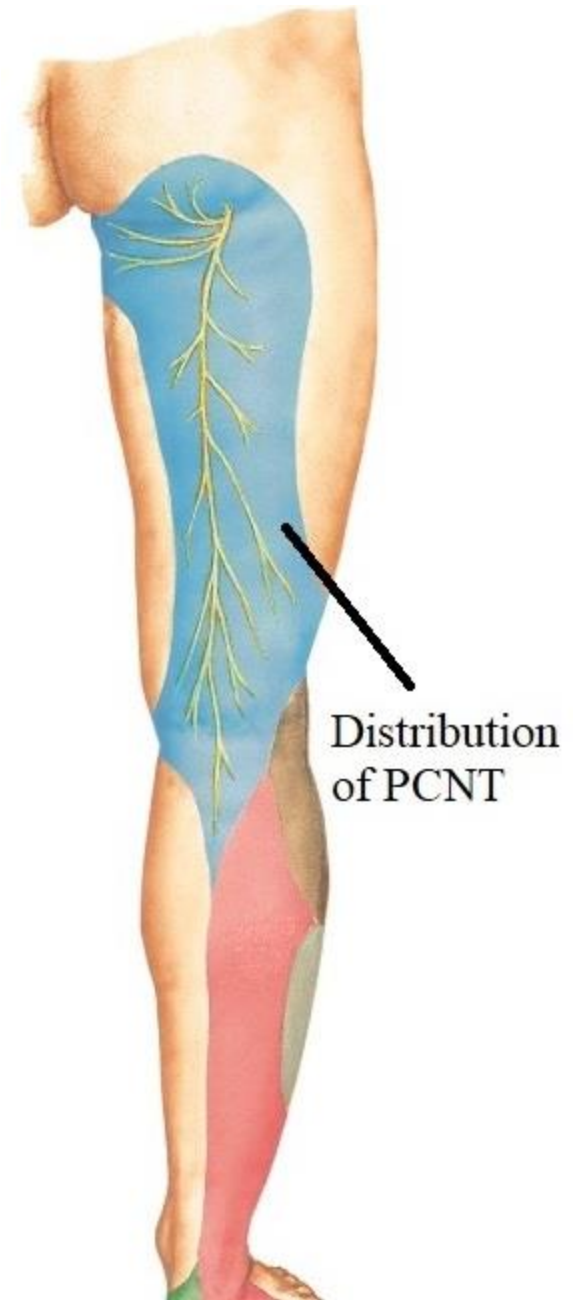
- pass through greater sciatic foramen below piriformis
- descends superficial to sciatic n.
- descend superficial to long head of biceps
- pierce deep fascia & accompany short saphenous vein to upper part of back of leg (calf)



POSTERIOR CUTANEOUS NERVE OF THIGH

Distribution

- skin of back of thigh
- skin of lower medial 1/4 of gluteal region
- skin of popliteal fossa & upper part of back of leg.
- skin of back of scrotum or labia majora.



THANK