

| | The lumbar plexus | SACRAL PLEXUS | COCCYGEAL PLEXUS |
|----------|--|---|---|
| | 1- The supply motor and sensory innervation to <ul style="list-style-type: none"> lower limb pelvic girdle 2- formed by the ventral rami of L1-L4 | 1 الموضوع الفرعي | 1- small network of nerve fibers 2- formed by <ul style="list-style-type: none"> anterior rami of S4 and S5 coccygeal nerve 3- supplies <ul style="list-style-type: none"> coccygeus part of the levator ani sacrococcygeal joint |
| Location | 1- in the abdomen (greater pelvis) 2- No pelvic structures are supplied by the obturator nerve | 1- located on the posterolateral wall of the lesser pelvis 2-- bed for the sacral and coccygeal nerve plexuses <ul style="list-style-type: none"> piriformis muscles coccygeus muscles 3- Most branches of the sacral plexus leave the pelvis through the greater sciatic foramen 4- The anterior rami of the S2 and S3 nerves — emerge between the digitations of these muscles 5- the sciatic and pudendal nerves — lie external to the parietal pelvic fascia | 1- It lies on the pelvic surface of the coccygeus <p style="text-align: center;">"ولا تظنني إليّ .. إنك إن تظنني إلى نفسي، تظنني إلى ضيعة وعورة وزنبٍ وخطيئة، وإني لا أئق إلا برحمتك .."</p> |
| Nerves | 1. The iliohypogastric nerve (T12,L1) 2. The ilioinguinal nerve (L1) 3. The genitofemoral nerves (L1,L2) 4. The lateral femoral cutaneous nerve (L2,L3) 5. The obturator nerve (L2,L3,L4) — No pelvic structures are supplied by the obturator nerve 6. The femoral nerve (L2,L3,L4) | (1) The sciatic nerve (2) The pudendal nerve (3) The superior gluteal nerve (4) The inferior gluteal nerve (5) Posterior cutaneous nerve of thigh | <p style="text-align: center;">يا صبيّ يا قيوم، برحمتك استغيت، أصابع لي شأني كلّه، ولا تظنني إلى نفسي طرفة عين "❤️"</p> |
| Nerve | <p style="text-align: center;">in the abdomen (greater pelvis)</p> 1- obturator nerve <ul style="list-style-type: none"> arises from the anterior rami of spinal nerves L2 L3-L4 of the lumbar plexus enters the lesser pelvis It runs in the extraperitoneal fat along the lateral wall of the pelvis an opening in the obturator membrane that otherwise fills the obturator foramen to the obturator canal | | 1- The anococcygeal nerves <ul style="list-style-type: none"> arising from this plexus pierce the <ul style="list-style-type: none"> coccygeus anococcygeal ligament supply a small area of skin between <ul style="list-style-type: none"> the tip of the coccyx the anus |

SACRAL PLEXUS

| | Origin | Supply | Course |
|---|---|---|---|
| (1) The sciatic nerve | anterior rami of spinal nerves L4, L5, S1, S2, S3 | 1- Articular branches to hip joint 2- muscular branches to flexors of knee in thigh 3- all muscles in leg and foot | usually inferior to the piriformis 1- the sciatic nerve passes through the greater sciatic foramen 2- to enter the gluteal region |
| (2) The pudendal nerve | S2, S3, S4 | 1- Structures in perineum <ul style="list-style-type: none"> 1- sensory to genitalia 2- muscular branches to perineal muscles 3- external urethral sphincter 4- external anal sphincter | between the piriformis and coccygeus muscles. 1- leaves the pelvis through the greater sciatic foramen 2- then hooks around the ischial spine and sacrospinous ligament 3- enters the perineum through the lesser sciatic foramen Accompanied by the internal pudendal artery |
| (3) The superior gluteal nerve | L4, L5, S1 | 1- Gluteus medius 2- gluteus minimus muscles | superior to the piriformis 1- leaves the pelvis through the greater sciatic foramen 2- supply muscles in the gluteal region |
| (4) The inferior gluteal nerve | L5, S1, S2 | 1- Gluteus maximus | inferior to the piriformis and superficial to the sciatic nerve 1- leaves the pelvis through the greater sciatic foramen 2- Both break up into several branches 3- enter the deep surface of the overlying gluteus maximus muscle accompanying the inferior gluteal artery. |
| (5) Posterior cutaneous nerve of thigh | S2, S3 | 1- Cutaneous branches to buttock 2- uppermost medial and posterior surfaces of thigh | |

1- Is the largest nerve in the body

1- is the main nerve of the perineum

2- chief sensory nerve of the external genitalia

1- supply muscles in the gluteal region

Number of small branches of the sacral plexus tend directly to supply muscles

| | Origin | Supply |
|---|------------|---|
| Nerve to piriformis | S1, S2 | Piriformis muscle |
| Nerve to quadratus femoris (and inferior gemellus) | L4, L5, S1 | Quadratus femoris inferior gemellus muscles |
| Nerve to obturator internus (and superior gemellus) | L5, S1, S2 | Obturator internus superior gemellus muscles |
| Pelvic splanchnic Nerves | S2, S3, S4 | Pelvic viscera via { inferior hypogastric pelvic plexuses |
| Nerves to levator ani and coccygeus | S3, S4 | Levator ani coccygeus muscles |