

Station 1

M W 36 years has a history of laminectomy due to a huge disc at L5-S1 level. She was operated one year ago but suffers nowadays of inability to walk mainly from her left leg & heaviness in her perineum. Sacral neuroplasty was performed & left adhesolysis for both left L5 & S1 with piriformis block caused very poor results.

On re examination she mentioned occasional simultaneous painful urgency for both urine & stools relieved by voiding. I noticed tenderness in her left ischial tuberosity with perineal pain surrounding both outlets opening of urethra & anus.

Nerve Block using PRF was performed after ensuring the contracture of levator Ani muscle using motor stimulation mode .

What is the nerve stimulated in the associated figure ?

How can you expose radiographically the left ischial spine ?

Additionally PRF left nerve blocs of S2 S3 S4 was performed .Why ?

Station 2

S S aged 57 is suffering from pain end of the day in both legs. Her pain is bilateral mainly on the medial side of both legs.

On examination there is bilateral +ve reverse SLR .

MRI reads :

L4/5 posterior annular relaxation is seen partially effacing the anterior epidural fat & just flattening the theca.

What does the type of pain denote at the end of the day?

What is the nerve affected based on the history & examination & why ?

In clinical pain practice:

Which is better for pain relief: intraforaminal or selective nerve root block & why?

How can you explain the cephalad nerve affected?

Station 3

A 63 years pharmacist is suffering from his back mainly on sitting & back & right leg pain on standing. Pain is mostly relieved when lying flat .On examination there is +ve Rt SLR & +ve Rt Reverse SLR, right paravertebral tenderness.

MRI reads L4-5 mild degree spondylolisthesis with pseudo diffuse disc bulge, mostly degenerative lithesis.

What is the detailed first procedure shown in Fig 1& 2 ?

Why is it justified?

What is the expected intervention in fig 3 ?

Why is it justified ?

What is the last procedure performed ?

How can you avoid subarachnoid block RADIOGRAPHICALLY ?

Station4

A middle age lady is suffering from bilateral cervical radicular pain reaching the forearm with associated left shoulder pain.

On examination tenderness on cervical rotation with extended cervical spine & left suprascapular tenderness.

MRI reads middle line disc protrusion & flattening of the dura between C5-C6 .

Describe the test to confirm radicular cervical pain ?

Figure 1 shows PRF for suprascapular nerve. Describe how to search for the nerve for good results ?

What are the parameters used in RF machine ?

What is the intervention in Figure 2 & 3 ?

Describe the position, the ideal site & the radiographic detailed help in order to have clear view of the cervical epidural space particularly for the predominant left radicular pain?

Station 5

Opioid tolerant –on oxycontin 40mg twice daily- middle age patient is scheduled for total Knee replacement. He has suffered from recent myocardial infarction & his cardiologist requested regional block. He is on 75mg clopidogrel & weekly 25 mg methotrexate.

How can you properly time your patient?

Describe the proper block required with the important technical details using your preferred tools?

Prescribe the set up for PCA with the additional oral medications.

Mention timing to resume medications

Station 6

A feverish (39 temp) 70 years male is admitted to National Cancer Institute; he is suffering from severe pain from advanced Pancoast tumor despite the below medications :

Ceftriaxone 1 gm daily .

MST 30mg twice daily.

Panadol 1 gm 8hly .

How can you improve his general & painful condition ?

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Station 7

A 41 years accountant had a motor car accident with resultant paralysis of his left leg.

A neurosurgeon fixed by nails his 5th lumbar & first sacral vertebra & put two stents via a ventral approach at L5/S1 & L4/L5 to release the compression of the relevant nerves. Unfortunately L4/L5 stent was misplaced posteriorly & bulged leftward in the spinal canal. Ability to walk & stand were resumed.

Nowadays (2 years later) patient is seeking pain relief particularly when standing (shooting to medial side of left leg) little walking & on prolonged sitting.

What is the intervention by the spinal needle in fig 1?

What is the intervention by the upper spinal needle in fig 2 ?

Where did the catheter end in fig 3 ?

Based on his permanent mechanical spinal lumbar stenosis which drug should be taken regularly?

Station8

As S S underwent laminectomy 15 month ago, She suffers from back & left leg pains. Pain is on sitting & walking.

MRI with dye reads:

Operative interference opposite L3/L4 level; L3/L4 posterior disc protrusion & enhanced epidural granulation tissue obliterating the anterior epidural fat with encroachment upon both exit foramina & filling the left lateral recess of L4 .

Why was MRI requested with dye ?

What are the interventions in figure 1& 2 ?

Which nerves are targeted?

What are the interventions in fig 3 & 4 ?

Which level & specific procedures are performed ? & why ?

Station 9

Middle age driver is suffering from neck pain reaching the big thumb.

Intervention is decided.

What is the level of needling in the associated picture ?

Why do you specify such level ?

Which arm is affected in such level ?

Paravertebral approach (not exact middle line) was used in order to visualize needle depth laterally.

How ?

A higher needling could target closer the radicular pain. Why is a lower approach classically chosen ?

What is the volume & solute used ?

Station 10

In the associated figure of the root of the neck:

Which structure is A ?

Which Structure is B ?

Which structure is C ?

Which Structure is D ?

Which Structure is E ?

Station 11

Describe in short the main measures for acute pain service in a patient undergoing resection for oesophageal cancer based on ERAS principals/ recommendations (*brief phrase of all below items*).

-Fasting:

-Block:

-Fluids:

-Opiates:

-Ambulation:

-Post operative pain medications:

Station 12

Answer by true (T) or False (F) for each statement

CLUSTER HEADACHE

- A-Is a bilateral continuous pain.().*
- B- May continue for one year.().*
- C-High altitude may be a trigger factor .().*
- D-Is not associated with autonomic features.().*
- E-Affect predominantly females.().*

TRIGEMINAL NEURALGIA (TN)

- A- The presence of trigger zone is pathognomonic.().*
- B- May be caused by tumours in cerebellopontine angle.().*
- C- It is always unilateral.().*
- D- Pain relief is longer with microvascular decompression.().*
- E- Atypical TN responds well to single agent treatment.().*

Station 13

A lady suffering from advanced cancer cervix undergoes the below block to relieve her pain.

What is the name of the block based on Fig 1, 2, 3, 4 & 5 ?

Fig 1 shows a needle entry close to sacral superior articular facet .What is the name given to such approach?

In the lateral view, where should the tip of the needle (or the dye) show ?

What is the volume & solute administered in each needle?

Mention possible complications of this block (regardless of the approach) ?

Station 14

-What is the name given to such a long needle ?

What is it used for ?

-What is the gauge of this pink RF needle ?

What is it used for ?

-What is the gauge of this short black needle?

What is it used for ?

-Could the shown vertebra corresponds to cervical vertebra 7 ?

& why?

Station 15

- 1- *What is the name given to the red shadow highlighted in red of the shown lumbar vertebra?
& Name the contralateral structure nerve -shown as white band-targeted in back pain?*

- 2- *What is the function of the associated needle with extension tubing?
Does it need any apparatus ?*

- 3- *What is the name & function of the provided catheter ?*

- 4- *Describe the function, gauge & length of the blue needle?
Is there a role to its beveled terminal end ?*

Station 16

When do you use the straight probe in Ultrasound (US)?

Mention an ideal example ?

When do you use the curved probe in Ultrasound (US)?

Mention an ideal example ?

Why US usage is evidence based in stellate ganglion block ?

Mention the three knobs needed to adjust in order to cannulate the left subclavian canulation ?

Why is it wiser to choose the left subclavian (not the right) in Canulation.

Station 17

In the associated figure :

1- What is the detailed scientific intervention ?

2- Why is it used for sacral neuroplasty ?

3- How can you avoid radiographically subarachnoid tap ?

4- Describe how to perform such a block for post operative pain relief to a child undergoing orchidopexy weighing 30 kg ?

- *Position for procedure :*
- *Type on needle :*
- *Type of local analgesia :*
- *Concentration & volume :*