

Station 1

A 34 years housewife is suffering from pain mainly on standing & walking more to the right than to the left. Pain is shooting on her right leg& is increased on straightening/extension of her back .

She has a history of laminectomy 6 months ago & is nowadays on extensive medications including 20mg escitalopram & 10mg buspirone (both SSRI).

What is the name given for this syndrome ?

How can you explain her pain on standing, walking &her shooting pain ?

Figure 1 shows 2 interventions:

What is the aim & target level & potential drugs used for such interventions ?

Fig 2 shows a 3rd needle:

What is the procedure performed by such a needle?

What is the name given to such therapeutic intervention?

Station 2

A 43 year lady suffering from pain on sitting in the lower dorsal region .She is unable to extend her back on the left side .Irrelevant past history .

On examination : Paravertebral tenderness in the thoracolumbar region mainly on the left side shooting to the left iliac crest .

Which level is the intervention in Fig 1 ? & what is the intervention ?

In figure 2 a block is performed in somatic spinal nerve (upper needle).

What is the level & name of the block ?

Kindly explain the relation between the somatic block & the referral to the iliac crest ?

In figure 2 another intervention (lower needle) is done.

Which structure is aimed for such intervention?

Station 3

A middle aged patient suffers from right lower backpain mainly on sitting ,

On examination while standing : Extension of her back while twisting to the left elicited her pain .

What is the level & site of lumbar vertebra targeted by the spinal needle in fig 1 & 2.?

0,3 ml dye injected in the space confirmed the site required .

What does the dye delineate in fig 1 ?

Fig 2 shows the effect of injecting 1ml local & corticosteroid .

Kindly explain the medial projection of the dye ?

Patient was relieved for few months but requested later an intervention for a much longer pain relief .

Kindly explain the anatomical sites for radiofrequency denervation for such joint in details ?

Station 4

Inoperable laparoscopic cholecystectomy was abandoned due to huge malignant gall bladder with liver & lymph nodes metastasis .

The 78 diabetic lady was referred to a pain clinician to relieve her epigastric ,right hypochondrium & upper back pain .

Patient was unable to lie prone & hence GA was given using Laryngeal Mask & spontaneous respiration .

What is the procedure done in Fig 1 & 2?

Mention the fluid volume & concentration used for such procedure ?

What is the procedure performed in figure 3 & 4 ?

Mention the volume & concentration used for such procedure ?

Patient was transferred to the trolley in the supine position .Fluids & vasopressors was given to adjust her low BP .

Patient was on 40 % oxygen & blood gases was taken with the following relevant results :

pH 7.02

p CO2 42.2mmhg

HCO3 st 10.0 mmole

How can you explain such results ?

How can you manage in details ?

Station 5

A heavy bar fell on the back of the neck of a weight lifter during training 4 years ago .

Nowadays (4 years later)he suffers from interscapular pain, posterior neck (levator site) & lateral arm pain on the right side .

He complains of muscular pain early morning & late afternoon,

What does the timing denote ?

On examination :

Pain is elicited on neck extension.

Which facet joints are likely the cause ?

Pain develops on raising his right arm .

Mention two likely pain generators (abductors) in the shoulder?

Radial forearm weakness reaching the big thumb was detected.

What cervical dermatomal level is affected ?

A nerve stimulator was used on the medial side of the scapula in order to alleviate this entrapment pain .Which nerve is likely the cause ?

Station 6

A 30 years (MS) lady suffers from incapacitating pain despite a laminectomy performed 6 months earlier .

On examination severe tenderness is elicited on pressing in the middle of lower back spine (site of laminectomy scar).

Laboratory results revealed the following :

TLC 5600/cmm N:4000-10000/cmm with PMNcells show mild shift to the left .

ESR First hour : 60 mm N for Female 12mm

Second hour: 110 mm N for Female 24mm

C reactive protein: Positive

CRP Titre : 40.5 mg/L N less than 5mg/L

What is your diagnosis ?

How can you manage ?

Tigecycline 50-100mg was given for 7days followed by 3rd generation cephalosporins for 2 weeks .

A month later pain intensity dropped & became only on walking & standing.

Laboratory results : ESR first hour : 20mm N for female12mm

Second hour: 45 mm N for female 24mm

CRP Titre : 20mg/L N less than 3mg .

Interventions were performed in order to relieve residual pain .

What are the present associated tools used?

What is the procedure performed in Fig 1?

What is the additional procedure & nerve targeted in figure 2&3 ?

What is the intervention in Fig 4 ?

Station 7

A 56y female patient presenting with severe pelvic pain, she has uterine cancer with metastases to mesenteric, para aortic lymph nodes and liver.

The pain is deep colicky pelvic pain that is not responding to MST 120mg/day + severadol 10 mg taken 5 times/day for breakthrough pain.

Patient is on "Xarelto" rivaroxaban 20 mg/day due to history of DVT in Rt Lower Limb since 6 months.

1. If you are planning to do an intervention for pain management, do you need any Laboratory investigations for this patient and how long will you stop Xarelto before procedure?
2. What is the procedure shown in Fig.1?
3. What is the perfect distribution of contrast 1 or 2?
4. What needle, type and volume of injectate in this procedure?
5. Enumerate complications in this procedure?

Station 8

A 42y male patient complaining of severe neck pain with referral to his Lt. upper Limb with tingling in his index finger, pain is electric shooting and increases with activity.

He is on pregabalin 75mg twice daily + ibuprofen 600 once daily + Tizanidine 2mg once daily for 1 month and not relieved.

He has done MRI cervical and revealed cervical disc prolapse with compromise of neural foramen.

1. What clinical test you can do to confirm radiculopathy?
2. What is your management for this case? Mention the Maximum dose for pregabalin and Ibuprofen.
3. What nerve root is involved and what level of disc prolapse usually cause this outcome ?
4. Do you prefer to do cervical transforaminal or interlaminar epidural using steroids and mention the kind of steroids used?
5. What is the view in Fig.1? what is its advantage in cervical epidural?

Station 9

A 60y old obese female who complains of Lt knee pain since 3 years, pain is stabbing in character and increasing with climbing stairs and walking, NSAIDs help to relief her pain but her internal medicine doctor told her that she must stop taking these analgesics as she has increased serum creatinine.

She heard about PRP injection and came to pain clinic asking about it.

This is her X-Ray on Lt knee.

1. What is PRP and what is its benefit in this case?
2. What is the perfect analgesic for this patient?
3. What is your proper education for this patient and what is the muscle that she should strengthen?
4. What can you inject intraarticular for this patient?
5. You decided to do a radiofrequency procedure for her, state the name, type of needle, length and active tip and state the proper site of needle entry (as numbers in attached figure), sensory and motor stimulation and proper temperature reached and duration?

Station 10

An opioid tolerant patient aged 80 years is to undergo total hip replacement.

Kindly organize the acute pain service management .

