Station 1

A 63 years lady is suffering from back & left leg pain. Pain is shooting to inner aspect as well as on the lateral side of left leg on walking. She is also complaining of pain on sitting in the left lower back .

On examination she has +ve SLR & reverse +ve SLR on her left leg.

1- What does it mean +ve reverse SLR ?

2- What are the interventions in figure 1 & 2

3 -What is the target & level of intervention shown in Figure 3 ? enumerate in details its nerve supply ?

4-What is the intervention in figure 4?

Describe the injectate ?

What is the structure injected in figure 5?

Describe its function ?

Station 2

A 62 lady is suffering from long standing neck & arm numbness & pains.

Describe the test to confirm her radicular symptoms ?

The associated Figure shows her neck .

What is the type of Xray presented ?

What is this view : Antero/Posterior or Postero/Anterior ?

Describe the anomaly present on this Xray ?

Which side is more affected ?

What are the name given to the group of drugs relevant to manage her pains ?

What is the ideal surgical intervention capable of potential long standing radicular pain relief ?

STATION 3

A 43 years old diabetic lady is suffering from pain on sitting & on changing position from sitting to standing mainly in her left lower pelvis .

Radiofrequency Interventions were decided due to limited safe drug outcome.

How can you follow the chronic abuse of NSAI drugs ?

What are the structure aimed at in Figure 1 & 2 ? & what is the pain generator ?

Figure 3 & 4 represent another pelvic interventions aimed to manage her mechanical backpain . What are the potential structure involved ?

Using the Radiofrequency machine for the above interventions:

What are the specifications of the RF needle used ?

How to test for the safe outcome?

What are the machine set up adjusted for conventional RF ?

Station 4

A 60 years man is suffering from advanced metastatic ca prostate. He has had radiotherapy for the pelvis as well as for his left osteolytic iliac bone . Nowaydays he leans forward in sitting to decrease his epigastric pain & has suprapubic pain shooting anteromedially to his left thigh .The recent (associated report) PET/CT reads:

- Newly developed right retrocrural LNs(fig1,mark1)

-Enlarged prostate with irregular outline (Fig 2 Upper cubicle)

-Progression of sclerotic osseous lesion at left iliac bone(fig 2 Middle cubicle)

-Amalgamated enlarged abdominal left para-aortic nodal mass lesion(Fig 2 lower cubicle).

On examination Suprapubic , left groin & anteromedial thigh skin burn .

Inability to lie flat & relieved by semisitting position Inability to walk unassisted in his left leg .

-How can you explain his inability to sleep flat & his relieve on leaning forward (Fig 1,Mark 1)?

How can you interventionally improve it ?

what is the cause of his pelvis skin burn?

How can you interventionally improve it ?

-How can you explain his anteromedial shooting left thigh pain (fig2 lower cubicle)?

How can you improve it ?

Station 5

Opioid tolerant –on oxycontin 20mg twice daily- middle age patient is admitted for total shoulder 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 prepare properly 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

Four weeks after correction of cooley's fracture patient is suffering from shooting non dermatomal oedematous arm pain relieved partly by hot foments . Figure 1 & 2 show the intervention .

1-What is the level of intervention in fig1?How can you identify clinically(surface anatomy)such level?

2-Why a blind (non radiographic) safer technique is adopted in such a level ?

3 -In figure 1 what is the fainted vertical striation (muscle) in the medial side denotes ?

4-In figure2 what is the level of intervention ?

5-What is the name of the block &what is the volume &concentration of local anaesthetic used ?

6-What is the ideal supine position :extended (pillow under the neck)or flexed neck?

7-Describe the level of your preferred technique (blind or radiographic) ?

8-What is the ideal needle length for an average adult?

9- Enumerate the side effects in favour of a successful bloc?

10 -Mention two major undesired complications?

Station 7

A 55 years lady is suffering from residual pelvic leiomyosarcoma after surgery. This retroperineal mass infiltrating left ileopsoas muscle is under intermittent chemotherapy & no radiotherapy . Pain is in her groin & anteriomedial thigh with numbness.

PET/CT of the pelvis is shown .

Based on the above picture & the detailed anatomy of the region which dermatomal lumbar nerves may be infiltrated?

Describe an initial pain management for this advanced neuropathic muscular pain ?

Despite escalating dose pain is uncontrolled & life expenctancy is considered less than 18 month…Can you think of a better interventional procedure for this left sided pain ?

Station 8

A 75 years diabetic osteoporotic old man fell from stairs. Plain xray shows partial fracture of lumbar 4 (fig 1).

CT shows disrupted posterior cortex of L4 .

Cementoplasty was performed using c-arm with cement filling in most L4 vertebra (fig2). Patient was unable to stand or walk particularly on his right limb with heaviness on the inner side of his right leg . MRI was ordered (fig 3 /4 show sagittal T2 pictures).

What is worrying in figure 1 & confirmed in the reported CT?

What is worrying in the post cementing plain xray (Figure 2)?

How this could have been technically avoided?

What is the nerve root clearly clinically affected ?

What is average volume recommended in cementing & why

In MRI pictures progressive mechanical compression of spinal cord is noted .

What is the conservative management you recommend ?

Station9

CHOOSE ONE CORRECT ANSWER ABOUT

Transversus Abdominus Plane (TAP) Block:

Clinical Anatomy & Pharmacology:

A-Is best performed using high concentration low volume technique.
B-Is best performed using low concentration high volume technique.
C-Can be used reliably as the sole mode of analgesia including visceral pain.
D-It blocks the posterior primary rami of intercostal nerves.

TAP Block:

A-The transversus abdominus plane is between the deep fascia of internal oblique & the superficial fascia of transversus abdominus muscles.
B-There is no need to visualize the spread of local anaesthetic with this technique.
C-When advancing the needle during TAP blocks, the needle tip is best seen with an out of plane needle view.
D-The transversus abdominal plane is best visualized in the midline of the abdomen

In the associated TAP block Ultrasound figure, what is the name given to the structure labelled:

A -
B -
C -
D -

Where should be the ideal site for deposition of local anaesthetic
X or Y or Z?

For post-operative pain relief in caesarian section, mention the volume & concentration of Bupivacaine deposited on each side of the abdomen.

Station 10

1-What is the gauge of the associated LONG needle?

What is it used for ? Mention 2 pain procedures .

2-What is the name given to the associated 50mm needle with red dote ?

How is it used ? Which procedure can be ideally performed ?

3-What is the name given to the red shadow in the given vertebra?

what structure can be presented by the white line on the other side?

4-With the nerve stimulator provided, which intensity is ideally accepted in order to perform a block?

Using the associated 5 em Bbraun stimuplex what procedure can be performed ?

5- What is the maximum dose per kg of lignocaine with or without adrenaline ?

In a vial of 50 ml lignocaine how can you prepare a concentration

of 1/100000 adrenaline per ml ?