Station 1

A 25 years man is suffering from back & leg pain.

His job entails lifting heavy goods .He is unable to straighten his back & walk with a forward bend to relieve his pain .His pain is mainly on standing & walking at the end his daily work.

1- What are the pain generators inflamed at the end of his daily work ?

2-What are the targets & level of interventions shown in Figure 1 &2 ?

3-What is the intervention in Figure 3?

How can you radiologicaly ensure safe injection?

4-What are the structures injected in figure 4 & 5 ?

How can you explain the bending of his back ?

What advice should you deliver in order to improve radically his exhaustif work ?

Station 2

A 62 lady undergone extended right hemicolectomy for undifferentiated carcinoma of her transverse colon. Two weeks after surgery she was referred to a pain clinician for severe epigastric pain with mainly left sided backpain. PETSCAN reads extensive paraaortic &retrocaval enlarged lymph node .

On examination epigastric tenderness &bilateral upper back flank pain .

Describe the test to confirm enlarged retroperitoneal structure(Lymph node in our case)?

Figure 1 shows a needle far anterior from the first lumbar vertebra performed from the left side of the vertebral column.

What is the name of such procedure ?

What are the volume& concentration of the drug used ?

Figure 2 shows another intervention from the right side flushed with the anterior surface of the first lumbar vertebra . What is the main precaution/safety performed while injecting your drug with the C Arm visualizing the lateral view of the vertebral column ?

Figure 3 & 4 represent further interventions at the thoracic level .

What is the name of such procedure & which nerves are involved ?

Describe the final position of your needle in the proper vertebra & mention the volume & drug used in every space ?

STATION 3

EPIDURAL ANATOMY

What is the name given to structure 1?

“ “ “ “ “ “ “ 2?

“ “ “ “ “ “ “ 3?

“ “ “ “ “ “ “ 4?

“ “ “ “ “ “ “ 5?

“ “ “ “ “ “ “ 6?

“ “ “ “ “ “ “ 7?

“ “ “ “ “ “ “ 8?

“ “ “ “ “ “ “ 9?

Station 4

A 53 years lady is suffering from neck pain & mainly right sided arm pain reaching the middle finger .

Describe how to perform the neck test to confirm the radicular pain generator?

Which cervical nerve root is mainly affected?

Figure 1(supine oblique)& 2 (supine A/P view)show the first intervention

What does the dye delineates in fig 1?& why dye is correctly posteriorly placed?

What is the safety in spinal needle medial introduction in A/P view ?& why?

Figure 3 & 4 show the second intervention while the patient is in prone position.

What is the expected intervention?

She has also bilateral suprascapular tenderness with muscular tenderness on the roots of the neck(medial to both scapular bones).

What is the nerve targeted in figure 5?

Enumerate its root ?

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

A lady under Rivaroscaban (XARELTO 10mg) for the prevention of venous thromboembolism is for emergency total hip replacement.

What is the mode of action of Rivaroscaban?

How can you rapidly prepare the patient for the operation?

Central neuroaxial was excluded and fascial block was decided.

What are the names given for the below numbers:

1

2

3

4

5

6

Describe the technique

Station 7

A 45 years old female who has undergone radical mastectomy one year ago suffers nowadays from left upper arm pain associated with lymphedema of the limb .

Interventional procedure using ultrasound is decided to relief her pain .

What is the name of the procedure in the below figure? & Which side?

Nominate the structures:

A

B-
C-
D-

What are the volume & concentrations of the relevant drugs used ?

What are the potential outcome of successful block you need to warn the patient about prior to the intervention?

Station 8

Associated Xrays Show gross anomaly

What is the type of Xray Shown in figure 1?

What is the evident anomaly present?

What does it denote ?

Which muscle is primarily affected?

Vertebral column also shows scoliosis to the left

What is the potential muscle affected ?

Station 9

What is this type of block?

What is the name given for such a block ?

What are the indications for performing such block?

What is the name of this approach?

Which neurolytic is used for this block & mention volume& concentration used?

Station 10

In the associated figure :

Which vertebra is targeted ?

What needle is used in robust adult?

Where is the end point of the needle ?What does the dye delineates?

Where is the entry point for such successful tunnel vision ?

What are the indications of this block ?

What are the volume & concentration of the drug used ?

STATION 11

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

OCCIPITAL NEURALGIA

A- Mostly seen with position causing hyperextension of the head .( )

B- Continuous dull ache is typical.( ).

C- Nerve blockade is diagnostic .( ).

D- Radio frequency lesioning can increase the duration of pain relief .( ).

TENSION HEADACHE:

A-Is mostly bilateral.( ).

B- Is seen more in females than males .( ).

C-Diagnosis is based on tenderness on manual palpation.( ).

D-Tricyclic antidepressants are first line treatment for prophylaxis.( ).

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.( ).

STATION13

What is the type of Xray in figure 2 ?

On the third row cement was targeting the body of vertebra; What is the gross malpractice present ?

While cementing what is the golden rule for C arm positioning (A/P or Lat)? & why ?

What is the expected complain after this intervention?

Pain is increased by….

Pain is relieved by …

STATION14

Middle age patient has undergone a successful laminectomy with fixation 10 years ago. Nowdays he is seeking pain relief from his limited walking & standing capacity ,

What is the name given to such syndrome ?

What is the level of fixation for his spondylolisthesis ?(fig 1).

What is the detail of requested MRI required to confirm site of radiculopathy?

What is the name of the procedure to improve his condition?

Fig1 shows a catheter from the sacral hiatus;

Where should end ideally the tip of this catheter for adhesolysis?

What is the additional drug important to use for such adhesolysis ?

Fig 2 shows another intervention;

What is the target structure ?

What is the persistent tender spastic muscle affected in such syndrome ?

STATION15

1-What is the type of vertebra present ?

What is the name given to the structure highlighted in red?

Which nerve corresponds with the white band targeted in back pain ?

2-What is the name given to the black needle ?

&What is it used for ?

3-Describe the function, gauge & length of its active tip of the blue needle?

4-What is the name & function of the provided catheter ?

Station 16

A 73 years old lady is suffering from acute herpetic pain affecting left Mandibular & Maxillary distribution of trigeminal nerve;

Despite early antiviral, anticonvulsant treatment pain is excruciating & beyond control. She came to the pain clinician 2 weeks after the eruption.

Which disease in young age is correlated with activation of Varicella Zoster virus ?

What is the name to the antivirus drug essential to be taken as early as possible for shingles?

What is the earliest symptom in Shingles (eruption or pain)?

What is the commonest chronic complication of herpes zoster ?

Repeated Stellate blocks failed to alleviate the annoying pain.But a progressive severe headache was impressively relieved by simple undiscrete maxillary block . What is the name of the ganglia correlated to the maxillary branch of the trigeminal nerve ?

The trigeminocervical nucleus is a region of the upper cervical spinal cord where sensory nerve fibers in the descending tract of the trigeminal nerve (trigeminal nucleus caudalis) are believed to interact with sensory fibers from the upper cervical roots.

Mention a peripheral sensory upper cervical block which can improve trigeminal headache? (see associated figure)

Station 17

1-What does the third mark of epidural catheter denote?

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

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

3-What is the type of vertebra presented ?

4-What is the potential function of the presented 11 gauge needle?

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 1/200000 adrenaline per ml