

RECOMMENDATIONS FOR SAFE PRACTICE WHILST PERFORMING EPIDURAL

1-Know the procedure well beforehand. Epidural is only allowed once success rate is good with single shot spinal. Minimum acceptable standard is 50 successful spinal blocks.

2-Always check, or flush the catheter before insertion. Make sure it has no manufacturing defect.

3-During insertion, never force the catheter against resistance. The catheter can kink or knot.

4- If insertion is unsuccessful, never pull out catheter via Touhy needle. Pull out the catheter and needle as one unit. Catheter can get sheared off since the bevel is sharp.

5- When removing the catheter, stop pulling if you think you are pulling against resistance. Normally good catheter can withstand a strong force unless it has been dented earlier.

6-What if the catheter traps? What are the maneuvers to facilitate the removal of the trapped catheter?

- To call for help
- To apply a gentle and steady traction on the catheter with the patient in the same position as during insertion.
- To maximally flex the patient in lateral position
- To rotate the spine
- To let the patient rest so as to soften the tissue before another attempt is made
- To fill the catheter with saline to increase its turgor
- **To abandon removal** of catheter if persistent resistant is encountered
- To re-attempt another day or remove under complete relaxation under general anaesthesia

7 -If the catheter snaps, it is quite safe to leave the "snapped catheter" behind as being quoted by most journals.

8-Exercise damage control. Document properly. It is a potential medico-legal event. Inform patient and next-of-kin and make sure the document is signed and witnessed. To inform Head of Department. Referral to appropriate unit (neurosurgery or orthopaedic) if necessary.

9-No hurry to explore surgically. Only to explore if there is sign of radiculopathy, infection or back discomfort or when the catheter has punctured the dura as confirmed by CT Scan or MRI.

10-However the final decision either for conservative or exploration should be agreed on with patient and clinicians involved.

11-Regarding the catheter set:-

- Do not throw the set
- Note the batch number
- Inform the company so the batch can be replaced
- To fill the “online Borang Aduan as in Medical Device Act”—Please refer to En. Asnan (HKL MA)

12-To give contact number to patient for further follow up.

In summary, prevention is better than cure should be the motto to remember.

**"NEVER force the catheter in, if it meets resistance
NEVER pull the catheter out, through Touhy needle
NEVER pull the catheter away, if it is against resistance"**

References:

1. Obstetric Anaesthesia and Analgesia--Practical Issues Handbook -2012
2. Suggested maneuvers to facilitate removal of a trapped catheter. Int J Obstet Anaesthesia, 2006 Apr; 15 (2): 159-162)

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24th July 2012

To be reviewed July 2015