

A Simple Solution to a Complex Problem

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Introduction – the problem

A 26 year old female in her first pregnancy

Suffers with complex regional pain syndrome (CRPS) and has done since 2009

Symptoms include allodynia, poor mobility

Left foot and leg particularly affected

Marked impact on activities of daily living

Polypharmacy - oxycodone, mirtazepine, propranolol, aspirin, clexane

Well informed and particularly apprehensive about the possibility that tissue damage and trauma would cause CRPS to spread, and also that autonomic dysreflexia may develop

Also worried about the impact of otherwise routine medical interventions - non invasive blood pressure monitoring, for example, and venepuncture - on her difficult to manage condition

The Solution

There is work suggesting that the provision of dense regional anaesthesia in the peripartum period prevents the spread of CRPS and subsequent development of autonomic problems

A referral was made by the obstetric team to the High Risk Antenatal Clinic at Ormskirk Hospital

Patient seen by a Consultant Anaesthetist

The lady was consulted and counselled with regard to the use of an indwelling epidural catheter pre and post delivery

Given her significant medical history an epidural was to be inserted twelve hours prior to induction of labour

The plan was agreed that post natal epidural analgesia was to be provided for 5 days, irrespective of mode of delivery

Concerns over prolonged epidural use were discussed

After admission to hospital an epidural was sited uneventfully at L2/3

0.1% l-bupivacaine and 2 micrograms per ml fentanyl solution was given at a rate of 10ml per hour

Intravenous cannulation and blood pressure monitoring were performed appropriately with CRPS in mind

Anaesthetists on duty for obstetrics were informed about the plan

The epidural was monitored using standard charts

Patient controlled bolus infusion was allowed and was used prior to patient mobilisation

The Birth

There was a maternal request for a (semi) elective C-section

An assessment was made by a Consultant Anaesthetist

Epidural "top up" was attempted using high concentration l-bupivacaine

Unfortunately the Anaesthetist felt that the epidural blockade was insufficient for the provision of analgesia for section

Inadequate analgesia and its potentially disastrous sequelae presented an unacceptable level of risk

The provision of general anaesthesia with the epidural still running intra- and post-operatively was discussed and thought to be the best option under the circumstances

A rapid sequence induction was performed, and a 2.9 kg baby girl was delivered

Supplementary fentanyl was administered epidurally

An uncomplicated recovery, with twice daily checks of the epidural site, was achieved by leaving the epidural in situ and the provision of dedicated midwife support

Follow Up

A few months post delivery the lady was telephoned and her progress enquired about

She had suffered no ill worsening of CRPS symptoms and was pleased that there was no development of dysautonomia

She also gave her permission for her case to be presented as a poster

Conclusion

There isn't a wealth of information about the use of an epidural as a preventative measure against progression of disease as well as for labour analgesia, but our experience of this technique is that it proved successful

CRPS is a difficult condition to manage and this, combined with the worries surrounding labour and its effect of the condition, can cause distress and fear for these patients

A well explained plan - and of course plan B (GA section) can help to provide a satisfactory outcome for all involved

Contact

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