



Total Parenteral Nutrition in Pregnancy

A Case Report

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The Case

A 32-year-old lady presented to our obstetrics unit 37 weeks pregnant whilst on Total Parenteral Nutrition (TPN). Natural conception whilst on TPN is a very rare occurrence with only a handful of cases reported in the last 30 years.

This lady had been on TPN for 19 months prior to conception and throughout pregnancy secondary to three major laparotomy procedures: duodenal perforation followed by pyloric stenosis, multiple dilatations and finally a gastrotomy.

The patient also suffered from dumping syndrome, asthma, anaemia, deranged liver function and polycystic ovary syndrome.

The pregnancy was further complicated with abnormal middle cerebral artery dopplers. In this case report we describe our experience and approach to this rare obstetric co-morbidity.



TPN in pregnancy

21 pregnancies in 15 patients estimated in the last 30 years

Causes: short bowel syndrome, motility disorders and mucosal disease

55% pre-term labour

67% maternal complication rate – mainly post-partum haemorrhage



The Issues

A multi-disciplinary team (MDT) involving obstetricians, general surgeons and anaesthetists discussed the merits of the different delivery and analgesic methods. The main concerns:

- 1- Surgical approach
- 2- Presence of adhesions
- 3- Bowel resection
- 4- Spinal versus epidural versus general anaesthesia (GA).

It was concluded that a vaginal delivery with an early epidural would be the safest and most effective route with the caveat of proceeding to top up for a caesarean section, and conversion to GA if a full laparotomy was required. This decision was taken in light of the patient's refusal for an elective caesarean section fueled by her previous surgical experiences. From the medical perspective an elective c-section would have been ideal with general surgical involvement under GA. This would allow for a controlled delivery in the event that significant adhesions were encountered, and delivery was complicated

A lumbar epidural catheter was cited, and the patient eventually had an induction of labour. Unfortunately, a meconium stained liquor was subsequently discovered and an emergency caesarean section declared. An epidural top-up was performed and a Pfannenstiell approach was taken to the abdomen with no significant adhesions found. The procedure was completed uneventfully with a healthy delivery and a pain free mother.

Conclusion

This case highlights the increasing complexity of the obstetric anaesthetic demographic and the importance of an MDT approach.

References

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