

Abstract

Title :

The comparison of the effects of intramuscular pethidine versus epidural analgesia on the progress of labour and analgesia during labour.

Objective :

To compare the effects of intramuscular pethidine and epidural analgesia on the progress of labour and maternal satisfaction during labour .

Methodology :

Primipara delivering at 37 – 41 weeks of gestation at Professorial Unit, Colombo South Teaching Hospital over two year period were offered either intramuscular pethidine or epidural analgesia as pain relief during labour. Intramuscular pethidine (1 mg / kg) was given to those in pethidine group and repeat doses at 4 hour intervals, epidural analgesia with top up doses every 4 –6 hours for epidural group. Duration of the first stage of the labour, the rate of cervical dilatation, duration of the second stage of labour, mode of delivery, the degree of pain experienced during labour and maternal satisfaction were compared in the groups using Fisher's exact test, Chi squared test, Mann-Whitney *u* test, Student's *t* test as appropriate.

Results :

A total of four hundred and sixteen women were studied (210 pethidine group; 206 epidural group). Mean duration of 7.7 hours (range = 5.4 –11.4) was taken by women in pethidine group and this was 9.1 hours (range = 5.8 –12.6) for epidural group ($p < 0.05$) for 1st stage of labour. The second stage of labour lasted less than one hour was seen in 91% of women in the pethidine group and 79% in epidural group ($p < 0.01$). Caesarean sections (16.5%) and instrumental deliveries (13.6%) are reported in the epidural group. Women in pethidine group had experienced more pain (39.6%) during labour compared with epidural group (14.1%) ($p < 0.01$). Fifty six percentage of women had good or excellent labour pain relief with intramuscular pethidine and 77% had good or excellent pain relief with epidural analgesia ($p < 0.01$).

Conclusions :

Duration of the first and second stages of labour is significantly affected by epidural analgesia. A higher intervention rate was also seen with epidural analgesia. However a greater pain relief was achieved during labour with epidural analgesia.