Foetal and maternal outcome of vacuum extraction

Abstract:

In a prospective study, 167 vacuum extractions (VE) performed at the Kenyatta National Hospital, Nairobi, formed 6.3% of the total deliveries. Most patients were young and of low parity. There were no maternal deaths. The overall maternal morbidity rate was 22% and were mostly minor. Post partum haemorrhage was the most common maternal complication. There were 5 failed VEs. Perinatal morbidity and mortality rates were 16.2% and 4.8% respectively. Intrauterine asphyxia was the commonest cause of death. Several complications could have been avoided by more stringent use of the instrument. The place of VE in a busy obstetric unit is discussed. PIP: A prospective study of all vacuum extraction deliveries in the maternity unit of the Kenyatta National Hospital, Nairobi, Kenya, in a 4-month period is presented. The vacuum extractions made up 167 (6.3%) of 2670 total deliveries, with 23.7% cesarean sections. The Bird's modified Malmstrom vacuum extractor was used, chiefly by residents (97%). In 97.% the maximum vacuum pressures ranged from 0.5-0.8 kg/sq. cm., developed over 5-10 minutes. Patients had local perineal anesthesia only (86.7%). 24% of patients had registered at the hospital for prenatal care. 88.4% of deliveries were at term. In 98.8% the head was less than 3/5 palpable per abdomen. The most common indications for vacuum extraction were prolonged 2nd stage (59.3%) and eclampsia (23.9%). 88.6% were done at full cervical dilatation. There were no maternal deaths; 21% of mothers experienced morbidity, most commonly hemorrhage .500 ml (8.4%), and lacerations (7.8%). There were 5 failed extractions, including 1 uterine rupture of a prior tear, and 1 procedural failure. Perinatal mortality was 4.8%, of which 6 were stillborn. Apgar scores ,7 occurred in 23.4% at 1 minute and 9% at 5 minutes. Since many of the mothers were young, of low parity, and referred in prolonged labor, the outcomes were to be expected. A concern was the high incidence of postpartum hemorrhage, now that transfusions should be avoided.