

Impacted fetal head (IFH); experience from the Princess Royal Maternity, Glasgow.
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Objective

Overcoming an impacted fetal head (IFH) at time of emergency caesarean section (EMCS) may result in morbidity. Techniques to overcome IFH are described but there is no national guidance regarding their use. Our objectives were to determine the incidence of IFH, the techniques used to overcome IFH and the maternal and fetal outcomes.

Design

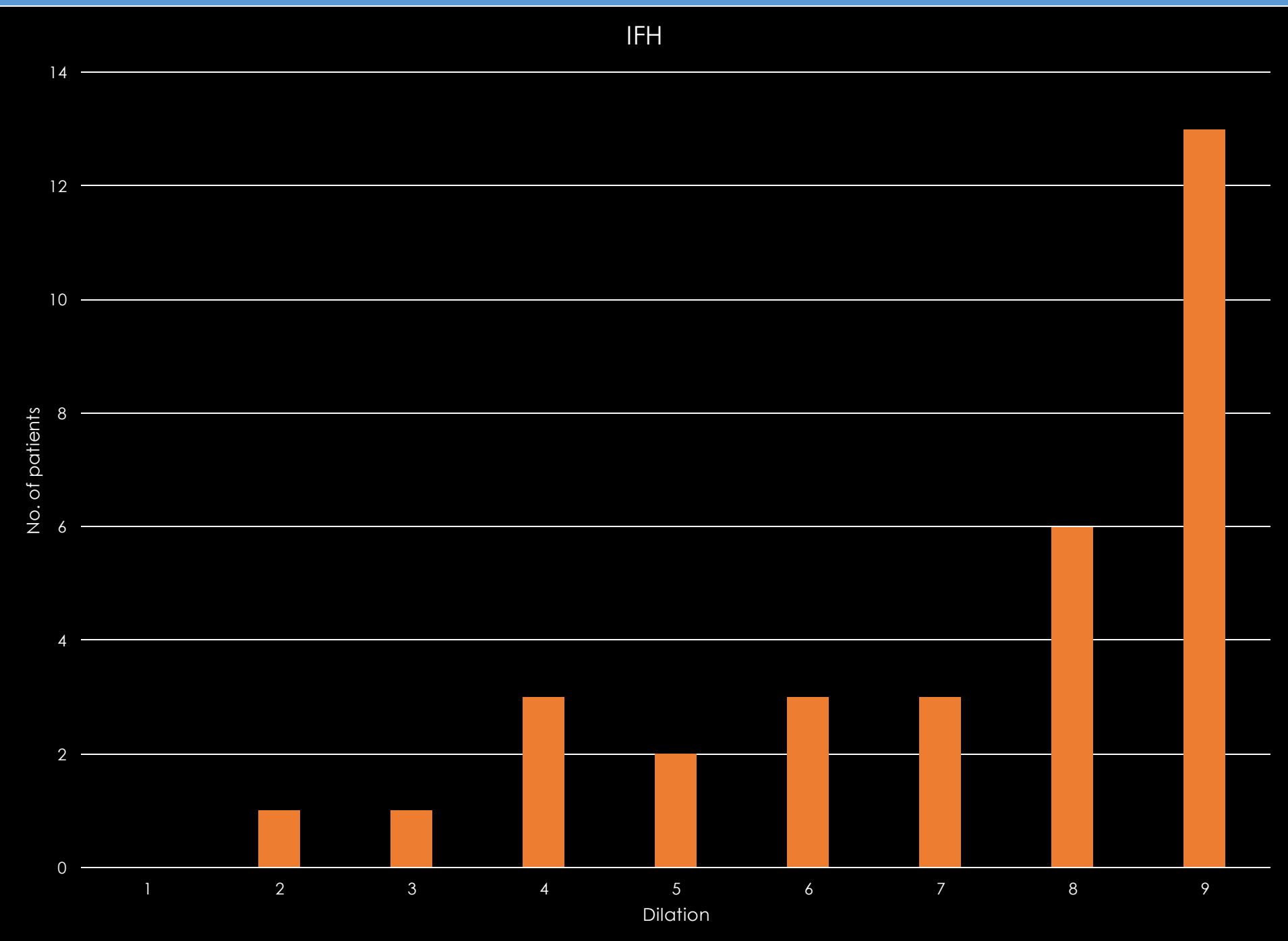
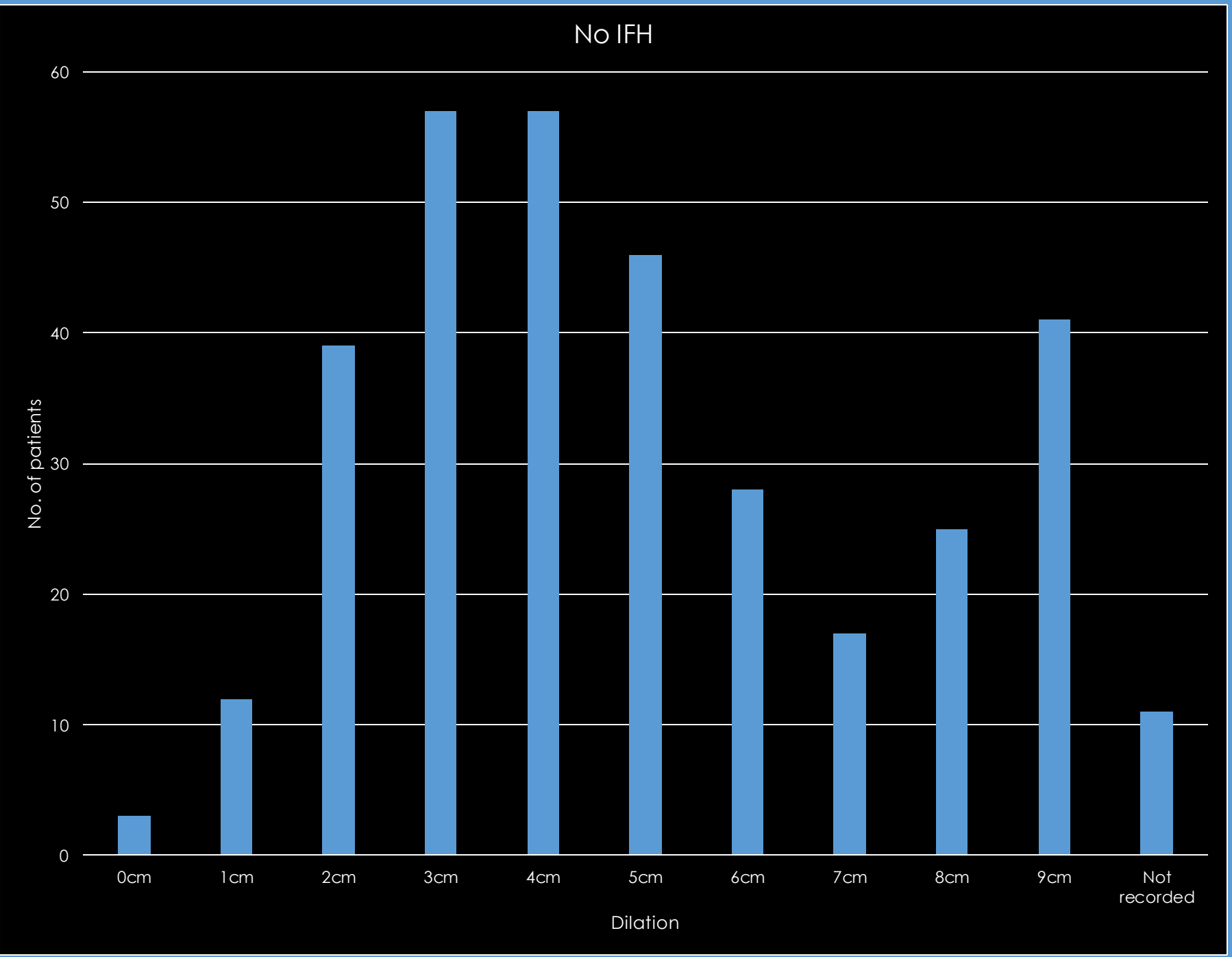
Retrospective review of the case records of women with a cephalic, singleton pregnancy giving birth by intrapartum EMCS (October 2021 and October 2022).

Method

IFH was present if the record indicated difficulty delivering the head or the use of additional manoeuvres. Cervical dilatation, blood loss, extension of the uterotomy, Apgar scores, umbilical cord pH and admission to the NNU were recorded.

Results

478 cases met our criteria (10.4% of all births). IFH was identified in 68 (14.2%). 368 EMCS occurred in the 1st stage of labour where IFH was encountered in 32 (9%). 110 EMCS occurred in the 2nd stage of labour where IFH was encountered in 36 (33%). Nearly half (47%) of all cases of IFH were encountered in 1st stage EMCS. IFH in the first stage of labour was more likely with increasing dilatation (5% at ≤7cms. and 22.4% incidence at ≥8cms. dilatation).



Techniques for overcoming IFH included ‘push up’ (9 in 1st stage, 6 in 2nd stage), table adjustment (3 in 1st stage, 5 in 2nd stage), birth by the breech (2 in 1st stage, 1 in 2nd stage). Two cases required > 1 technique in 1st stage, 4 cases required > 1 technique in the 2nd stage).

Extension of the uterotomy was more common in the presence of IFH (28% v 4%) as was requirement for blood transfusion (7% v 2%). Where artery pH was available, pH was <7.1 in 18% with IFH and 3% no IFH. Apgar scores of ≤7 at 5 minutes recorded in 1% following IFH and 2% without IFH. NNU admissions were 7% following IFH and 5% without IFH. There were no cases of neonatal trauma or HIE.

Conclusion

IFH is commonly encountered in EMCS, including 1st stage EMCS. In our unit, Consultant or ST7 presence is mandated at all EMCS in the second stage of labour which may account for the absence of neonatal trauma. The unpredictability of encountering IFH justifies the development of a standardised approach to the management of IFH since access to a senior obstetrician may entail delay in a time critical situation.

