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Delivery of an impacted head during caesarean section. An easy and reliable manoeuvre: to assess adequate and safe hysterotomy and to control bleeding

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SUMMARY: **Delivery of an impacted head during caesarean section. An easy and reliable manoeuvre: to assess adequate and safe hysterotomy and to control bleeding.**

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"Push or pull" are the two methods by which an impacted head may be delivered during a caesarean section; the pull method is the one preferred. A manoeuvre is hereby described through which a deeply wedged head may be disengaged prior to hysterotomy. The success of this manoeuvre allows delivery of the head through a low uterine segment transverse hysterotomy. Its failure is an indication of reverse breech extraction to be performed through a longitudinal caesarean section; which to the Author's experience proved to be less traumatic and easier to repair than an inverted T shaped or a very curved transverse LUS hysterotomy. To Authors experience, longitudinal hysterotomy when properly repaired is not an indication to tubal ligature. The routine use of this manoeuvre allows a quite bloodless caesarean section.

RIASSUNTO: **Disimpegno, nel corso di un taglio cesareo, di una testa profondamente impegnata. Manovra semplice ed efficace per individuare una isterotomia adeguata e per il controllo delle emorragie.**

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L'estrazione, nel corso di un taglio cesareo, di una testa profondamente impegnata può avvenire tramite la spinta dal basso (push method) oppure tramite il disimpegno del podice, come primo tempo, e la successiva trazione (pull method); quest'ultima sarebbe la tecnica da preferirsi. È proposta una manovra di retrazione della testa profondamente impegnata attraverso l'utero integro; la non riuscita di questa manovra è indicazione all'estrazione podalica, che è attuata tramite isterotomia longitudinale (taglio cesareo classico) laddove non è ottenibile un adeguato rilasciamento uterino. Tale manovra, attuata nei tagli cesarei normali, consente di ottenere degli interventi in sostanza esangui.

KEY WORDS: Obstructed labour - Impacted head - Deeply wedged head - Caesarean section.
Parto ostruito - Testa profondamente impegnata - Taglio cesareo.

Modern obstetric care and the increasing rarity of severely contracted pelvic have, in western countries, led to the virtual disappearance of obstructed labour; while in underesourced countries it counts for being one of the major causes of Caesarean Sections, maternal mortality, morbidity and disability (VVF, RFV and peroneal plexus damages).

Most cases of obstructed labour can be prevented by intelligent anticipation during the antenatal period, but the majority of them are seen after a mother has been labouring for a long time.

During a caesarean section, an impacted head may be delivered by pushing it back through the vagina, with a fist or hand (push method), by interposing a hand through the stretched LUS and head, by performing a reverse breech extraction (pull method). The last, also according to Authors' experience is preferred, although not exempt from complications as extended in various degrees, LUS tears and massive bleeding.

As spinal anaesthesia being the only available one

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in rural hospitals, does not allow adequate uterine relaxation, to the very curved LUS transverse hysterotomy, a supplementary vertical incision (inverted T shaped hysterotomy) is quite often required, with the inconvenience of not infrequently extending upward, featuring at the end a longitudinal hysterotomy with two supplementary lateral incisions.

This led us to reconsider classical Caesarean section as an alternative to L.U.S C.S in case of impacted head, and to devise a method to select adequate hysterotomy (transverse, longitudinal).

Method

The abdomen is entered through a sub-umbilical midlime laparotomy, as the bladder, being pulled upwards by the stretched LUS, might be very easily injured by a Pfannenstiel or Joey Cohen incision; not even the midlime laparotomy is exempt from urinary bladder lesions, which can be easily prevented by the simple pulling up, through the abdomen, of the Foley catheter balloon and assessing therefore the upper margin of the bladder.

"Once the abdomen is entered, a hand is placed below the synphisis and tries to grasp and retract the head; if the manoeuvre succeeds a LUS caesarean section can be safely performed. If not a classical caesarean section has to be considered".

If the manoeuvre succeeds, the head is grasped firmly and pulled upwards; the pressure exerted from inside on the LUS will assure a quite bloodless hysterotomy and an easy delivery of the head.

This manoeuvre is routinely performed during every Caesarean Section.

Conclusions

Since adoption of this technique our Caesarean sections have proven to be quite bloodless; this is most relevant as, in the Tropics, anaemia due to malaria and intestinal parasites is most diffused and blood transfusions difficult to obtain and sometimes unsafe.

Being confident with Classical Caesarean section technique will allow delivery of baby by the breech with a minimal hysterotomy, which shall eventually be closed in three layers; the first one with interrupted stitches knotted inside the cavity (thus allowing a minimal amount of suturing material inside the miometrium) the second one with a running suture; the third one with a mattress suture to avoid oozing surfaces and prevention of adhesions.

There is a current belief that classical hysterotomy means tubal legation. We don't share this belief as we feel that it is the quality of suturing which counts more than the hysterotomy itself. We have been able to allow a trial of scar in some cases which were followed by a normal vaginal delivery; and in two cases we performed elective LUS C.S on two subsequent pregnancies; the longitudinal scar being quite unidentifiable.

Bibliografia

1. BLICKSTEIN I.: *Difficult delivery of the impacted foetal head during caesarean section: intraoperative disengagement dystocia.* J. Perinat Med. 32(6);465-9 (ISSN: 0300-5577), 2004.
2. FASUBAE O.B., EZECHI O.C., ORJI E.O., OGUNNIYI S.O.: *Delivery of the impacted head of the foetus at caesarean section after prolonged and obstructed labour: a randomised comparative study of two methods.* J. Obstet Gynaecol. 22 (4):375-378 (ISSN:0144-3615), 2002.
3. KAWAWUKUME E.Y.: *Caesarean section in developing countries.* Best Pract Clin <Obstet Gynaecol. 15(1); 165-78 (ISSN: 1521-6934), 2001.
4. LEVY R., CHERNOMORETZ T., APPELMAN Z., LEVIN D., OR Y., HAGAY Z.J.: *Head pushing versus reverse breech extraction in cases of impacted foetal head during Caesarean section.* Eur J Obstet Gynaecol Reprod Biol. 121 (1): 24-26 (ISSN:0301-2115), 2005.