Injury to Women in Childbirth: The Consequences of Maternal Birth Trauma

Evidence submission from The British Society of Urogynaecology (www.bsug.org.uk)

While the reports of baby deaths in Morecambe Bay, Shrewsbury and elsewhere are of great concern, attention must also be paid to the increasing rate of injury/trauma to women during childbirth. We as urogynaecologists see many young women with the distressing consequences of birth trauma and this is likely to be a small proportion of the total number affected as many suffer in silence. Submissions from MASIC and Birthrights will explain more about women's experiences and their stories are 'harrowing'. This is arguably part of the same problem as for baby deaths i.e. in some cases suboptimal care of pregnant women.

We would like to provide evidence about how and why this is happening and what needs to be done to reduce the risks.

Firstly, the rate of maternal birth trauma has increased in recent years with the previous Chief Medical Officer (CMO) reporting the consequences (in 2104) i.e. that 33% and 10% of women will have urinary and faecal incontinence respectively at 6 weeks postpartum and 10 years later 20% still report urinary and 3% faecal incontinence. As she stated: *"This is morbidity, not mortality, but the number of women affected is enormous"*.

Similarly, for pelvic organ prolapse up to 31% will have symptoms at 12 and 20 years, even after just one delivery. That is rarely seen in women who have not been pregnant; vaginal childbirth is known to be the main factor associated with these conditions. As mentioned, the incidence is increasing.

While the committee's work will focus on safety for babies we feel that safety for women should also be highlighted, particularly the consequences of birth trauma i.e. pelvic organ prolapse, urinary and faecal incontinence. These are conditions that represent a significant public health burden as well as great personal distress. Surgical rates for these childbirth-related problems have risen, and this has been predicted to increase further as the population ages. Results of surgery are inconsistent with a risk of complications and the need for further operations over time. This is at considerable cost to the patient, healthcare providers and society. An attempt to improve success rates by using vaginal mesh has resulted in serious complications for some women, as reported in the Cumberlege inquiry.

The understanding of the mechanisms/pathophysiology of birth trauma has grown in recent years and is known to result in symptoms e.g incontinence and prolapse by 6-12 months after delivery in 35% of those with severe injuries compared to 15% with minor injuries. Unsurprisingly these have significant physical and psychological consequences for young women and can lead to many years of repeated treatments including surgery.

For example problems reported by those who'd suffered an obstetric anal sphincter injury (OASI) by the UK Birth Trauma Association (2017) include pain, difficulty establishing breastfeeding, poor bonding with their baby, poor bladder and bowel control, sex and relationship difficulties, tokophobia/fear of another pregnancy, post-traumatic stress and post-natal depression, all of which can seriously affect quality of life.

There is arguably now a higher risk population for birth trauma. There are several identified risk factors which now include increasing age at first delivery, obesity and larger birthweights (National Statistics UK 2011) along with an increasing rate of instrumental delivery, particularly forceps.

Are Women informed of the Risks?

It appears not, despite the UK's Supreme Court ruling which states that: *Where either mother or child is at heightened risk from vaginal delivery, doctors should volunteer the pros and cons of that option compared to a caesarean*. (Montgomery v Lanarkshire Health Board UK 2015).

Studies, including a survey from Birthrights and MUMSNET suggest that the risks of vaginal delivery with respect to trauma and its consequences are not routinely discussed with women antenatally even in those at higher risk. They should be informed as per the Montgomery ruling, and women want this information. For example, in a recent qualitative study, *'all women wanted to know their risk of developing pelvic floor dysfunction* (i.e. incontinence and prolapse) *to help make informed decisions'.* They also reported that knowing their risk would motivate them to undertake preventative strategies such as pelvic floor muscle training/exercises. However, midwives and obstetricians had concerns that providing such information would result in more requests for caesarean section. This could be an incorrect assumption as most women did not mention caesarean in this study nor in the OASI Care Bundle study of over 55 000 women (see below); even after explaining the risk of bowel/faecal incontinence following an OASI, there was no increase in caesarean rate.

STRATEGIES FOR PREVENTION OF PFD

Pelvic Floor Muscle Training [PFMT]

There is good evidence that antenatal PFMT can prevent urinary incontinence in late pregnancy and postpartum, and reduce pelvic organ prolapse symptoms and the need for further treatment.

Current NICE Guidelines and the International Consultation on Incontinence recommend that all women in their first pregnancy should be offered supervised PFMT with a

physiotherapist or specialist nurse. This is currently being included in the NHS's Long-Term plan and is welcomed.

Avoiding smoking, constipation and maintaining a normal weight/BMI can also help as part of a prevention strategy.

How can trauma be prevented at childbirth?

- Preventing OASI using the 'OASI Care Bundle' which includes good information and communication, manual perineal protection/'hands on the perineum' and, only when indicated, episiotomy at a 60 degree angle. Perineal and rectal examinations are important to prevent missed tears as these are the ones that can result in faecal incontinence. The Care Bundle, which was developed by the RCOG and RCM with the support of NHS England and the CQC, has been shown to reduce the incidence of OASI, similar to the findings of several studies from Scandanavia. However there has been negative social media comments about this form of prevention from some midwives and obstetricians claiming that it is not evidence-based. This claim has been strongly refuted by the RCOG/RCM Care Bundle working group in recent correspondence in the journal 'Midwifery'.
- Instrumental Delivery: except where delivery is urgent i.e. for fetal distress, vacuum/ventouse is preferable to forceps as it has been shown to have a lower rate of OASI and pelvic floor muscle damage. However, forceps rates in the UK have risen in recent years compared with other countries where vacuum is the instrument of choice. The reason for this difference is unclear.
- Episiotomy to be used with instrumental delivery: the highest rate of OASI has been reported in women delivered with forceps *without* an episiotomy. Although clinical

guidelines recommend episiotomy with forceps, as evidence shows this reduces rates of OASI, greater awareness and education is needed.

What about those at high risk of birth trauma?

As mentioned, those at high risk should be informed as per the Montgomery Supreme Court ruling and if these risks are deemed 'material' by the patient, then should she be informed of the protective effect of a planned caesarean section. This needs to be in conjunction with a discussion of the risks and complications of a planned caesarean as well to allow an informed decision to be made (see below).

Does Caesarean Section prevent trauma and its consequences?

The evidence suggests that planned caesarean provides protection against OASI, a major cause of faecal incontinence, and a consistent protective effect for the prevention of pelvic organ prolapse. However, many midwives and obstetricians fear that mention of the protective effect of planned caesarean will lead to rising requests despite evidence suggesting the contrary (above).

Risks and Costs of Planned Caesarean Section (CS)

While there are understandable concerns about morbidity following caesarean section, this discussion needs to be in the context of what the patient considers to be of importance. In a report from the patient group Birthrights (2018) women stated that during counselling about caesarean section there was: *"a tendency for the risks of caesarean to be emphasised or exaggerated".*

The following facts should be considered:

- Planned *as opposed to in-labour* CS: the incidence of surgical complications is low.
- Placental complications especially a deeply adherent placenta (placenta accreta), which can cause haemorrhage if not diagnosed before delivery, can occur with multiple CS's. However, World Population statistics (2015) show that in developed countries the fertility rate is 2-3 babies per woman. Should they all be delivered by planned CS, the risk of accreta with the 2nd and 3rd delivery is only 0.24%, 0.31% respectively and so for the individual woman, the risk is low.
- Childhood illnesses e.g. asthma, diabetes, obesity and, stillbirth in the next pregnancy have been cited as reasons to avoid caesarean section. However, these are statistical associations only, with *no* evidence of a causal relationship between those illnesses and planned caesarean section. The same applies to the association with the fetal microbiome where there is much conflicting evidence and again no evidence of causality.
- Cost: Again, the evidence is unclear. While NICE state that planned caesarean is approximately £700 GBP more expensive than vaginal delivery (https://www.nice.org.uk/guidance/cg132/resources/costing-report-pdf-184766797), in a sensitivity analysis of this guidance when litigation and 'compensation for harm' costs are included, planned caesarean is found to be £439 GBP *less* expensive than vaginal delivery.

  In addition, costs for the treatment of adverse events, mental health support for post-traumatic stress disorder (PTSD) (both more common after vaginal delivery than planned caesarean), and the long-term cost-avoidance for pelvic organ prolapse surgery have not been included in the NICE guidance. Therefore, for those women at highest risk of birth trauma and its consequences, planned caesarean is arguably cost-effective.

Recommendations:

BSUG proposes that prevention of birth trauma and its consequences should be discussed with every pregnant woman as part of her antenatal care. This does not appear to be happening possibly because of the anxiety amongst healthcare professionals that this will lead to more requests for planned caesarean. However as mentioned above there is no evidence to support this.

Identifying those at risk and providing information can help with counselling and prevention strategies such as pelvic floor muscle training, weight control and delivery management e.g. ventouse rather than forceps, OASI Care Bundle and for those women at highest risk of birth trauma, planned caesarean section; that should be mentioned and women allowed a choice regarding her type of delivery.

In an increasingly higher risk population for birth trauma and its consequences e.g. incontinence and pelvic organ prolapse, the risks of vaginal delivery as well as those of planned caesarean section should be discussed as per the UK's Supreme Court ruling and women be given the right to choose.

References can be supplied on request

15 September 2020