Planned Cesarean Delivery Offers Protection Against Pelvic Floor Disorders

By www.electivecesarean.com
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Evidence exists that planned cesarean birth avoids the pelvic floor trauma associated with vaginal delivery. As a new study warns of increasing rates of pelvic floor disorders, women should be informed of this during antenatal risk-benefit analysis.

A new study published this month warns that pelvic floor disorders are set to increase substantially in America over the next 40 years due to changing demographics.(1) Pauline McDonagh Hull, editor of electivecesarean.com highlights medical studies that demonstrate an increased risk of these disorders following vaginal delivery (VD) and a protective benefit with planned cesarean delivery (CD), plus evidence that women are not being informed of these facts.

KEY FACTS
*Pelvic floor trauma is a reality, not a myth.(2)
*Pelvic floor trauma as a result of vaginal delivery (VD) can cause significant morbidity.(3)
*The greatest risk factor for pelvic organ prolapse (POP) is a VD, at any age.(4)
*CD has a protective effect, similar to nulliparity [no children], on the development of pelvic floor disorders when compared with VD.(5)

BACKGROUND
An Australian study in 2007 found that the risk of pelvic floor trauma increases for every year of delay in child-bearing, and that instrumental VD almost doubles the odds of trauma. It warned that the "global trend towards delayed child-bearing may result in an increased prevalence of pelvic floor disorders in coming decades."(6) This month, Dr Wu et al(1) predict that by 2050, as many as 58.2 million women will have at least one pelvic floor disorder, including 41.3 million urinary incontinence, 25.3 million fecal incontinence, and 9.2 million POP cases. This is evidence of an aging population, yes, but it is also evidence that increasing numbers of older first-time mothers may be a significant factor too.

EVIDENCE THAT PLANNED CESAREAN DELIVERY OFFERS PROTECTION
- "CD is associated with a lower risk of POP than VD", in fact a "strong and statistically significant association" in 1.4 million Swedish women.(7)
- "The most important long-term maternal benefit of CD is potential protection of the pelvic floor, reducing the incidence of incontinence of stool, flatus, and urine, as well as POP."(8)
- "CD has a protective effect, similar to nulliparity [having no children], on the development of pelvic floor disorders when compared with VD" found a U.S. survey of 4,458 women.(5)
- "The risk of prolapse was significantly increased in women with one, two, and three or more VDs compared with nulliparous women" in a Norwegian study of 2,001 women.(9)
- "Perineal injury sustained during childbirth is a major aetiological factor in the development of perineal pain, sexual dysfunction, prolapse and disturbance in bowel and bladder function… selective CD in these women can be beneficial in preventing complications."(10)
- "Pelvic organ supports… can be disrupted in childbirth… such trauma is associated with pelvic organ prolapse, bowel dysfunction, and urinary incontinence. Elective CD seems to have a limited protective effect."(2)
- "CD is not associated with a significant reduction in long term pelvic floor morbidity compared with spontaneous VD the difference between CD and instrumental delivery was significant" in 3,010 respondents.(11)

PREGNANT WOMEN SHOULD BE INFORMED

- - In 2007, a U.S. survey found that only 1 in 5 women (19%) are even aware of POP, 68% of those diagnosed with it were not aware of its existence prior to symptoms, and worse still, 81% of mothers were not informed of the risk while pregnant (only 15% were).(4)
- - In 2005, the U.S. VCU Institute for Women's Health said that the long-term effects of laceration trauma (which may include "chronic fecal incontinence, perineal pain, recto-vaginal fistulas and pain during sexual intercourse") is "an issue faced by many women with VD and it is important that we educate women about the consequences of severe vaginal tears."(12)
- - In 2002, a Canadian commentary concluded that for CD versus forceps-assisted VD, "it's time to include pelvic injury in the risk-benefit equation."(13)

EVIDENCE OF STRESS URINARY INCONTINENCE (SUI) PROTECTION

*VD is factor most strongly associated with SUI and elective CD may be protective.(14)
*Increased risk for lower urinary tract symptoms with VD compared to elective CD.(15)
*CD reduced risk of postpartum SUI; differences persisted by parity and after excluding instrumental VD.(16)
*Significantly lower prevalence of postpartum SUI with elective CD than VD… elective CD has a protective effect.(17)
*Increased SUI, use of protective pads, fecal urgency and gas incontinence with VD compared with CD.(18)
*CD protective against postpartum UI.(19)
*Elective CD significantly reduced postpartum SUI.(20)
*Less UI after first CD.(21)
*Less persistent and long term UI with exclusive CD.(22)
*Significantly lower prevalence of SUI with elective CD with no trial of labor.(23)
*History of CD significantly less likely to report SI than history of VD.(24)
*Exertion incontinence one year postpartum lower with CD.(25)
*CD at any stage of labor reduces postpartum UI.(26)
*Lower incidence of SUI with CD compared with normal spontaneous VD.(27)
*Significant reduction in the prevalence of SUI with a CD.(28)

EVIDENCE OF FECAL INCONTINENCE (FI) PROTECTION

*Anal sphincter rupture is a serious complication of VD and many women suffer permanent FI after it.(29)
*Symptoms of mild FI, mainly gas incontinence, increased after VD more than CD; occult anal sphincter defects occurred in 23% VDs, none with CD.(30)
*Principal risk factor for FI is childbirth; in most cases at least one VD had perineal injury or forceps.(31)
*FI is associated with forceps and anal sphincter laceration.(32)
*VD leads to direct mechanical trauma to the anal sphincters; after CD there were no changes in continence, anal pressures or rectal sensibility.(33)
*Forceps had almost twice the risk of FI while CD appears to offer some protection.(34)
*After VD, 25% had FI and 45%, abnormal anal physiology; no FI after CD.(35)
* No FI after CD; anorectal physiology unaltered only with elective CD or CD in early labor; CD in late labor is not protective.(36)
*No FI after elective CD.(37)
*No new sphincter defects after CD.(38)

QUOTE

Pauline McDonagh Hull: *"There are risks and benefits with both planned CD and VD, and pregnant women (with their individual tolerances and preferences) should be informed of these.*
"Positive psychological and physical birth outcomes matter more than cesarean rate targets."

IMPORTANT NOTE

*A nationwide U.S. study in 2003 uncovered significantly higher than expected vaginal complication rates in hospitals with lower than expected CD rates and lower than expected vaginal complication rates in hospitals with higher than expected CD rates, "suggestive of, but not definitive of, inappropriate under-utilisation of preplanned first time CD".(39)

REFERENCES

(full version with live links available at electivecesarean.com)

1. Wu et al, 2009
2. Dietz HP and Lekskulchai O, 2006
3. Abdool et al, 2009
4. International Communications Research (ICR) for ETHICON, 2007
5. Lukacz et al, 2006
6. Dietz HP and Simpson JM, 2007
7. Larsson et al, 2009
8. Minkoff and Chervenak, 2003
9. Rortveit et al, 2007
10. Fernando RJ, 2007
11. MacLennan et al, 2000
12. Nichols C, 2005
13. Farrell SA, 2002
14. Panayi et al, 2009
15. Ekstrom et al, 2008
16. Press et al, 200xc7
17. Groutz et al, 2007
18. Altman et al, 2007
19. Burgio et al, 2007
20. Eftekhar et al, 2006
21. Glazener et al, 2006
22. MacArthur et al, 2006
23. Groutz et al, 2004
24. Handa et al, 2004
25. Schytt E, 2002
26. Farrell et al, 2001
27. Mason et al, 1999
28. Wilson et al, 1996
29. Lainea et al, 2009
30. Pinta et al, 2004
31. Lunniss et al, 2004
32. Eason et al, 2002
33. Willis et al, 2002
34. MacArthur et al, 2001
35. Donnelly et al, 1998
36. Fynes et al, 1998
37. MacArthur et al, 1997
38. Sultan et al, 1993
39. Healthgrades, 2003

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This website aims to present the specific risks and benefits of planned versus emergency cesarean delivery, and to explain why planned cesarean delivery is a legitimate birth decision.

Its editor, Pauline McDonagh Hull, is also co-founder of the Coalition For Childbirth Autonomy (www.coalitionforchildbirthautonomy.org) and writes a blog on the subject of cesarean delivery (www.cesareandebate.blogspot.com).

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