AIMS For a better birth...

Research Roundup

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Risk of scar rupture

A US study has looked at the risk of scar rupture in over 3500 women who gave birth after a previous caesarean. They compared those who had a repeat section, those who had a spontaneous labour, those who were induced with oxytocin and those who were induced with misoprostol. Of the whole group, 19 suffered a rupture in the uterus.

The risk of rupture was lowest in those who had repeat caesareans - 0.2 per cent (one out of 438 women). The next lowest risk was in those with a spontaneous labour - 0.4 per cent (11 out of 2523 women). The next highest risk was the oxytocin group - 1.2 per cent (seven out of 572 women), with the highest risk with misoprostol - 1.4 per cent (two out of 142 women).

There was, on average, a slightly higher risk for women who had had more than one C-section. In the oxytocin group, this was 1.1 and 1.9 per cent for one and more than one section, respectively.

AIMS Comment

We don't know how the labours - spontaneous or otherwise - were managed or the dosages involved. But when women are told about higher risk, it's good to have an idea of how big those risks may be.

This confirms, yet again, that women who want a vaginal birth after caesarean (VBAC) should avoid induction if possible. With an induction, women are more likely to request epidurals for pain relief that are sometimes thought to mask early signs of rupture. We also need to remember that the type of closure used for the previous Csection may affect risk, and a randomised trial is now ongoing comparing single- and double-layer closures.

Reference

- Lin C, Raynor D. Risk of uterine rupture in labor induction of patients with prior cesarean section: An inner-city hospital experience. Am J Obstet Gynecol, 2004; 190: 1976-8

Multiple births raise cerebral palsy risk

Statistics from 14 cerebral palsy registers across Europe have been collected to assess the risk of cerebral palsy in multiple births - twins, triplets or more. It's long been known that babies who share a womb have a higher risk largely because they are likely to be born smaller and sooner. Singleton babies born too soon or too small also have a higher risk than those who are full term and bigger.

If looking at changes in cerebral palsy rates over time, changes in the number of multiple births will have an effect. In fact, between 1980 and 1990, the multiple-birth rate in four European countries rose from 1.9 per cent to 2.4 per cent. The cerebral-palsy rate for single babies was 1.8 per 1000 live births vs 7.6 per 1000 for twins and other multiples. Sadly, a higher percentage of multiple babies had spastic cerebral palsy, and were also more likely to be affected on both sides. This was not because they were sharing the womb, but solely due to earlier birth and smaller size. With twins, the second twin was more likely to be affected than the first.

The authors point out that, although the rate of cerebral palsy has not increased, the numbers affected has - because of the increase in multiple births. These changes have social implications. They suggest the increase is caused by fertility treatments, and rising age of mothers having their first baby.

AIMS Comment

To us, figures on the page may represent mums and dads we've spoken to - they are real. It's important to be aware of the risk of babies being damaged.

What is not mentioned - but which concerns us very much - is the greater risk of having twins after taking folic acid. This was revealed in a large randomised study in Hungary, and is well known, but mothers are not told this when they are urged to take folic acid to lower the risk of spina bifida. Is the suffering of a child with cerebral palsy any less important?

Reference

- Topp M et al. Multiple births and cerebral palsy. Acta Obstet Gynaecol Scand, 2004; 83: 548-53

Weighing babies

"The tools we have for assessing weight gain in infancy are not suitable for use in the first month."

It is well known that babies lose weight after birth which is then regained - but when, how much and what is considered 'normal'?

The standard growth charts don't make allowances for the weight loss that takes place in the first few days. Babies are thought to lose 4-7 per cent of their birth weight, and begin regaining the weight by day 3. But the basic research on this was not based on large numbers. The weight babies lose is largely from fluid, but some of it may be fat loss.

As the authors of a new study point out, "perinatal weight loss is a well known but little studied phenomenon". So, they did a larger study. Nearly 1000 full-term babies born in Gateshead were weighed at days 5 and 12, and week 6. At day 5, the babies had lost an average of 50 g and were likely to be about 1 per cent below their birth weight. A third had already regained their birth weight, but 3 per cent were more than 10 per cent below it.

At day 12, the babies, on average, had gained 200 g and over 80 per cent had regained their birth weight, but a few were still more than 10 per cent below it. But the weight gain was still less than the current UK and US charts (based on small-scale studies) predict. By week 6, all of the babies had regained their birth weight.

At both day 5 and day 12, 26 children were more than 10 per cent below their birth weight. Five of them were admitted to hospital, but none had major medical problems, and most had recovered by six weeks.

The smallest babies lost little or no weight while the heaviest babies lost the most. Breastfed babies, on average, gained less weight, and were more likely to lose more than 10 per cent of their birth weight. But, as these babies tended to be heavier at birth - and such babies lost more weight anyway - once this was allowed for, the difference between breastfed and bottlefed babies could have happened by chance.

As the authors admit, they do not have figures for the time when maximum weight loss is thought to occur - around day 2 or 3 - but they point out that this is less important than what happens over time.

What they have found is that "both US and UK charts give the impression that all children are below the norm in the first fortnight, as well as misrepresenting the growth of children born at the extremes of 'term' gestation."

They've shown that the charts used in the US are misleading, and say that, until they are modified, users of growth charts should be warned of their important limitations regarding the first three weeks of life.

AIMS Comment

Weight gain and loss, and professionals' comments or actions as a result, are a source of great anxiety to mothers, and sometimes lead to inappropriate advice and action. Weighing after every breastfeed was common at one time because, without a bottle, no one could see how much the baby was getting. But this was dropped because it caused more trouble and anxiety than it was worth.

However, in the past few years, we've seen worrying weight loss in some babies, and admission to hospital for 'failure to thrive' (often used as a marker for children at risk because of poor maternal care), solely because mothers had not been given the proper advice and support for breastfeeding ('need for breastfeeding support' was actually the diagnosis).

One mum became so desperate while in a London teaching hospital that she phoned another teaching hospital, pretending to be a patient, just to get breastfeeding advice - which they efficiently and kindly gave (thank you, St Mary's).

When a mother has daily visits from the same community midwife, changes can be observed and problems discussed. But with cuts in the midwifery service, many mothers no longer have daily visits for 10 days - and that's when things can go wrong (see our cover story, pages 1-5).

Reference

- Wright CM, Parkinson KN. Postnatal weight loss in term infants: what is 'normal' and do growth charts allow for it? Arch Dis Child Fetal Neonatal Ed, 2004; 89: F254-7

Breastfed babies dying of thirst?

In August, a shocked mother described how her first baby became dangerously ill because, unknown to her, he was not taking in enough breast milk[1]. Christina Hopkinson was discharged from hospital two days after a caesarean, as many mothers are nowadays. The community midwife visited for two days, said the infant was breastfeeding beautifully and, on Thursday, said she would return on Monday. What could go wrong in four days?

Little William looked thinner over the weekend, so the midwives were called and asked if he was lethargic. As he was not, they said it was probably all right. By the time the midwife returned at 4pm on Monday, the baby had lost 25 per cent of his birth weight, and was rushed into special care.

William had not been sucking properly, and the lack of fluid meant he had high sodium levels (hypernatraemia), which could cause brain damage or death. How could they have known? He had not been listless, but was pink and lively.

He was slowly rehydrated (doing it too rapidly can cause fits) and was able to go home eight days later, fully breastfed. By four months, he was fine and, fortunately, had no permanent problems. His mother is angry that she was discharged so early and with so little support.

But this is not the first such story we have heard. Other mothers have told us of similar experiences, but we don't know how many there are out there.

Two years ago, doctors in Edinburgh wrote of their concern that these problems might be increasing in breastfed babies[2] and that the rise has been caused by mothers being sent home from hospital sooner than before. In Canada when the length of stay was reduced from four to two days, readmission rates rose from 27 to 38 per 1000; the risk was particularly high for dehydration, jaundice and feeding problems.

Another study reports a cluster of cases in Ohio after length of hospital stay was reduced.

Three years ago, Bristol reported seeing one case each month, in some cases, with a hospital stay of six days before mothers went home. This raises the question of quality of breastfeeding advice and support in the unit. At least one other mother told us the same thing had happened to her baby while she was on the postnatal ward, without breastfeeding support.

Raised sodium levels were thought to be a problem of bottlefed babies, when mothers used too many scoops of powder, making the feed too concentrated; it was thought unusual in breastfed babies. It is more likely to happen with a first baby, where the mother has no previous experience. Most commonly, the baby doesn't take in enough breastmilk - if babies are premature or small-for-dates, they may not be able to suck sufficiently powerfully.

But how is a mother to know? The baby may be lethargic or irritable, but not necessarily so, as in William's case. Poor weight gain and poor growth may be the only sign before there is serious deterioration. The sunken eyes and depressed fontanelle are not reliable signs as the condition can cause swelling of the brain, thus masking the effects of dehydration.

The authors suggest that all babies whose weight loss is more than 10 per cent should be checked, and suggest that all babies should be weighed several days after discharge, perhaps when the Guthrie test is carried out on day 5 or 6. They also suggest that community midwives have proper weighing scales, although they admit that weighing "may cause parental anxiety and result in a mother abandoning breastfeeding altogether". Nevertheless, it is "not acceptable to gloss over individual breastfeeding tragedies [as] ... it discourages mothers" from breastfeeding.

AIMS Comment

This mother's story is a salutary one but, above all, it shows one of the risks of depleted resources that we have been seeing for a long time - postnatal wards with too few staff, staff who know too little about breastfeeding and mothers having reduced visits from the community midwife after discharge. What we see from mothers' stories is a focusing on 'failure to thrive' as a sign of their inadequacy or, worse, as a classic sign of child abuse. If routine weighing at around five days is recommended, we want it piloted, with a randomised trial, and with views of mothers and community midwives included.

Reference

1. Hopkinson C. When a baby stops feeding. Daily Telegraph, 27 Aug 2004
2. Laing IA, Wong CM. Hypernatraemia in the first few days: is the incidence rising? Arch Dis Child Fetal Neonatal Ed, 2002; 87: F158-62

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