

The difference in lymph node harvest is statistically significant but is it clinically significant? The role of pelvic lymphadenectomy in gynaecology oncology is contentious, and there is no evidence that a complete lymphadenectomy is better than a thorough sampling. Lymphadenectomy for cervical cancer is thought to be therapeutic but Massi *et al.* (1993) have demonstrated how tenuous this belief is. Lymphadenectomy for endometrial carcinoma is not curative and suboptimal removal will not affect survival but may alter local recurrences. Despite this, many oncologists believe that the best chance of cure from uterine or cervical surgery comes from radical surgery and anything less may put the woman at a disadvantage. Therefore, if laparoscopic oncologists are to compete with their traditional colleagues, they must demonstrate equivalent clearances in their hands.

I had hoped to confirm the previous animal studies (Johnson *et al.* 1994), but these data suggest that we could

not remove as many nodes using minimal access surgery, compared with a conventional laparotomy. The difference is small but supports those who argue that more access must mean better clearance.

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Small fetal transverse cerebellar diameter: a screening test for spina bifida

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Prenatal diagnosis of spina bifida by ultrasonography has improved after the recognition of cranial (lemon-shaped head) and cerebellar (banana-shaped) signs in affected fetuses (Nicolaidis *et al.* 1986). The use of these signs in high risk populations has a sensitivity of 98% and a false positive rate of 0.8% (Van Den Hof *et al.* 1990). Among three low risk populations no cases of spina bifida were missed (Chitty *et al.* 1991; Luck 1992; Shirley *et al.* 1992). However, a recent regional study has reported that only 60% of cases of spina bifida were detected (Northern Regional Survey Steering Group 1992).

Cranial and cerebellar signs are subjective but measurement of the fetal transcerebellar diameter (TCD) is quantitative. This study examines the value of TCD as a screening test for spina bifida.

Subjects and methods

During an eight-year period (1986–93), 261 cases of fetal open spina bifida were diagnosed in our unit by ultrasonography at 16 to 24 weeks of gestation. In 53 cases

the cerebellum was not measured, although it was reported to be banana-shaped in 45. Gestational age was calculated from menstrual data and confirmed by ultrasonographic measurements of the fetal femur length (Hitachi EUB360, Aloka SSD-650 or Aloka SSD-68). In each case the fetal cerebellum was examined, and the TCD was measured in the sub-occipitobregmatic view of the head. A value of zero was given if the cerebellum was not detectable, presumably due to major herniation down the cisterna magna. Values of TCD in unaffected pregnancies (40 from each week of gestation 14 to 24 weeks) were derived from a study of 1040 pregnancies that resulted in term delivery of healthy, appropriately grown infants (Snijders & Nicolaidis 1994). Measurements of the fetal TCD in unaffected and affected fetuses were converted into multiples of the median (MoM), and the sensitivity and false positive rates for each cut-off point were calculated.

Results

In the 208 fetuses with spina bifida the cerebellum appeared normal in 15 (7%), was absent in 57 (28%) and was banana-shaped in 136 (65%). Additionally, in 200 fetuses (96%) the head was lemon-shaped, and in 140 (69%) there was ventriculomegaly (anterior or posterior hemi-

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Table 1. Transverse cerebellar diameter (TCD) MoM values in 244 spina bifida pregnancies and 440 unaffected pregnancies.

TCD (MoM)	Pregnancies				Likelihood ratio
	Unaffected		Spina Bifida		
	Cumulative Frequency	%	Cumulative Frequency	%	
≤ 0.01	0	0	57	27.4	∞
≤ 0.60	0	0	60	28.8	∞
≤ 0.65	0	0	64	30.8	∞
≤ 0.70	0	0	79	38.0	∞
≤ 0.75	0	0	96	46.2	∞
≤ 0.80	3	0.7	122	58.7	83.86
≤ 0.85	6	1.4	141	67.8	48.43
≤ 0.90	18	4.1	166	79.8	19.46
≤ 0.95	79	18.0	189	90.9	5.05
≤ 1.00	259	58.9	201	96.6	1.64
≤ 1.05	314	71.4	204	98.1	1.37
≤ 1.10	401	91.1	207	99.5	1.09
≤ 1.15	431	98.0	208	100.0	1.02
≤ 1.20	439	99.8	208	100.0	1.00
≤ 1.25	439	99.8	208	100.0	1.00
≤ 1.30	439	99.8	208	100.0	1.00
≤ 1.35	440	100.0	208	100.0	1.00

* MoM = multiple of the median for unaffected pregnancies.

spheric ratio > 97.5th centile). In the 151 affected pregnancies in which the cerebellum was visible, the mean TCD was significantly smaller than the normal mean for gestation (Δ TCD = -2.9 SDs; $t = -17.83$; $P < 0.0001$). Table 1 shows that a cut-off point of ≤ 0.9 MoM allowed detection of 80% of open spina bifida with a 4% false positive rate.

Discussion

The findings of this study suggest that screening for fetal spina bifida by measurement of TCD has a similar sensitivity and false positive rate to screening by maternal serum alpha-fetoprotein (Wald & Cuckle 1993). Serum screening is disadvantaged in that screening and diagnosis involve different processes at different times. In ultrasound screening, based on TCD measurement, both screening and diagnosis can be performed at the same time. The difference is in the intent of the ultrasonographer, and a small TCD may trigger this change in intent. Other markers of spina bifida, such as lemon-shaped skull and ventriculomegaly, can then be detected. The definitive diagnosis of spina bifida requires considerable operator skill and is less easily applied on a mass scale so that referral to a tertiary centre may still be required.

If ultrasound screening for spina bifida in low risk populations was shown to be as sensitive as serum screening, it may either replace or be combined with serum screening (Wald & Cuckle 1993). The conclusion is that fetal TCD can be measured routinely with an assessment

of the shape of the fetal skull so that a small TCD or lemon-shaped head may alert the sonographer to undertake a thorough examination of the fetal spine. This could be achieved by inserting an action window into the fetal biometry programme or into the ultrasound machine itself.

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