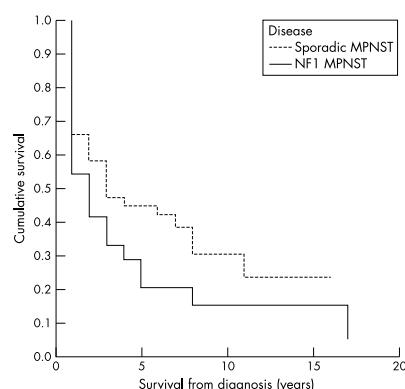


# PostScript

## CORRECTIONS

In the May 2002 issue of the journal, in the paper by Evans *et al* on "Malignant peripheral nerve sheath tumours in neurofibromatosis 1", the Kaplan Meier curve published in the article was an analysis from birth to current age or death rather than from diagnosis. The p value attached to the curve related to the analysis from diagnosis. The correct figure of survival from diagnosis is shown below.



In the letter by Maher *et al* on "Beckwith-Wiedemann syndrome and assisted reproduction technology (ART)" in the January 2003 issue of the journal (vol 40, pp 62-64), there were four errors in the first paragraph of the Methods and result section and in the Key points. The correct paragraphs are reproduced below with the errors noted in bold.

## METHODS AND RESULTS

We reviewed the notes of 149 BWS patients who had been referred to the BWS Research Group at the Birmingham University Section of Medical Genetics and/or the West Midlands Molecular Genetics Service (for uniparental disomy analysis) and for whom detailed clinical information had been collected. A history of assisted conception techniques was recorded for six cases (4%) (table 1). To estimate whether this was likely to be a significantly increased proportion, we compared the frequency of in vitro fertilisation (IVF) and ICSI births in the BWS cohort with that in the general population. The first ART associated BWS case was born in 1989 and the most recent in 2002. Data for the number of children born after ART are available for 1995, 1996, 1997, 1998, 1999, and 2000 ("http://www.hfea.gov.uk"/www.hfea.gov.uk) and during these years there was a total of 43 074 births after IVF or ICSI to UK residents. The corresponding number of total births in the UK was 4 320 482, so that 0.997% of births in the general population were after IVF or ICSI. Based on these data, if the proportion of births after IVF and ICSI in BWS patients and in the general population were similar, we would have expected **1.4855** of the 149 BWS patients studied to have been born as a result of IVF or ICSI. To test the significance of the observed and expected frequencies we used a Poisson approximation to the binomial distribution and obtained a two tailed p value of **0.009**. Thus, the observed frequency (n=6) of IVF and ICSI births in the BWS series is significantly greater than the expected (**1.4855**), with an associated 95% confidence interval on the excess risk of 1.5, 8.8. It should be noted that (1) although these calculations do not take account of maternal age, there is no reported evidence that maternal age in BWS births differs from that in the general population and (2) data on the frequency of IVF and ICSI births are not available for years before 1995. Had such data been available, then this would have very probably reduced the expected number of BWS births after IVF

or ICSI, as the birth rate in the general population has been declining since 1989 and the annual number of ART births before 1995 would have been less than during the five years included in the comparison. Therefore our comparison is likely to be conservative in relation to calendar year.

## Key points

- Beckwith-Wiedemann syndrome (BWS) is a model imprinting disorder resulting from mutations or epimutations affecting imprinted genes on chromosome 11p15.5.
- Recently a possible association of Angelman syndrome, another human imprinting disorder, and intracytoplasmic sperm injection (ICSI) has been described.
- To determine if there might be an association between ICSI and BWS births, we reviewed the incidence of assisted reproduction technology (ART) births in a cohort of 149 sporadic BWS births.
- Six of 149 (4%) BWS children were born after ART (three after ICSI and three after in vitro fertilisation (IVF)) compared to ~1.0% in the general population (p=0.009).
- These observations support an association between ART and human imprinting disorders.
- As both IVF and ICSI procedures were associated with BWS, loss of maternal allelic methylation at differentially methylated regions within imprinted gene clusters associated with in vitro embryo culture may be an important factor in the pathogenesis of ART associated imprinting disorders.