Wiedemann–Beckwith syndrome in one of monozygotic twins

Sir,

The article by Bose and his colleagues\(^ 1\) deserves some comment. It is certainly unusual to find an exomphalos in one of monozygotic twins, although it has been described before. To label a baby as Beckwith–Wiedemann syndrome simply on the basis of the presence of an exomphalos and a large tongue is surely, however, not justified. The essence of the syndrome is the combination of exomphalos, macroglossia, and gigantism, manifest as both somatic and visceral megaly, together with the sporadic occurrence of other features such as indented ear lobes and naevoid flameaeus. The definitive histological diagnosis is based on the finding of cytomegaly of the adrenal cortex. In the absence of some corroborative findings it would be more reasonable to consider this baby as suffering from exomphalos, complicated by the incidental finding of macroglossia.

I am also interested in the authors’ use of the term Wiedemann–Beckwith syndrome. Since the syndrome was described by Beckwith in 1963 (Beckwith JB. Extreme cytomegaly of the adrenal fetal cortex, omphalocele, hyperplasia of the kidneys and pancreas, and Leydig cell hyperplasia—another syndrome? Presented at annual meeting of Western Society for Pediatric Research, Los Angeles, California, 1963.) and by Wiedemann in 1964\(^ 2\), then for both chronological and alphabetical reasons it would seem reasonable to use the well established and recognised terminology of Beckwith–Wiedemann syndrome. Perhaps, however, the authors can explain the justification for this change.

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Drs Bose and Forsyth comment:

We thank Mr Brown for his interest in our case report.\(^ 1\) Although exomphalos, macroglossia, and gigantism are common features of Wiedemann–Beckwith syndrome they are by no means constant. In the review of 49 cases of the syndrome by Fillipi and McKusick,\(^ 3\) which included the original cases reported by Wiedemann\(^ 4\) and Beckwith,\(^ 4\) macroglossia was present in 95% of cases, exomphalos in 93%, hypoglycaemia in 82%, visceral megaly in 79%, and macrosomia in 74%. Birth weights of 12 infants in this series,\(^ 3\) born at term, ranged from 2900 g to 5675 g, with a mean value of 4050 g. Comparable figures were found by Irving\(^ 5\) with a mean value of 3857 g as her series included preterm infants as well. The infant that we described\(^ 1\) had macroglossia that eventually required partial glossectomy, exomphalos, hypoglycaemia, and, if compared with her identical twin, has appreciable macrosomia, which is still present at the age of 2 years. We therefore feel that there is sufficient evidence to support our clinical diagnosis of Wiedemann–Beckwith syndrome.

Provided that both investigators\(^ 2\) \(^ 4\) are acknowledged we do not have strong views on the terminology used to label the syndrome. We note that Beckwith first described autopsy findings of this syndrome at the annual meeting of Western Society for Pediatric Research in 1963, and subsequently in two living children in 1964 at the same time as Wiedemann’s formal publication.\(^ 2\)

References


\(^ 4\) Beckwith JB. Macroglossia, omphalocele, adrenal megaly, gigantism and hyperplastic visceral megaly. Birth Defects 1969;5:188.


Transcutaneous oxygen and carbon dioxide monitoring in intensive care

Sir,

Determination of end tidal carbon dioxide in children who require respiratory support is non-invasive, more closely related to arterial carbon dioxide, and more convenient than determination of transcutaneous carbon dioxide tension.

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Dr Helms comments:

Dr Singh suggests that end tidal carbon dioxide is less invasive and more closely correlated to arterial carbon dioxide than transcutaneous measurements. This has not been our experience, as the accompanying Figure shows, particularly in children with lung disease. The relation of end tidal carbon dioxide to arterial carbon dioxide depends on the evenness of gas mixing within the lung and the time available to reach a true end tidal plateau. Our data suggest that this is rarely the case in children with lung disease. We have found the end tidal carbon dioxide technique very useful, however, in the management of children with raised intracranial pressure and with normal lungs. It is in this latter group that episodes of intracranial