Table  Analysis of published papers

<table>
<thead>
<tr>
<th>Author</th>
<th>No studied</th>
<th>Mean creatinine excretion (μmol/kg/day)</th>
<th>Postconceptional age (days)</th>
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<td>35</td>
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![Graph](image-url)  

Fig 2 Weighted regression of pooled data; daily creatinine excretion (μmol/kg/day) on postconceptional age (days). y=55.2+0.13x, r=0.8, p=0.01.

of muscle in the body; the implication of our conclusion is that the proportion of body weight that is muscle increases from 29 weeks' postconceptional age. This is in keeping with the percentage increases that is known to occur at later ages—but that is, from 25% at full term, to 45% at puberty.

We do not feel it possible to derive a normal range from the summary statistics in the absence of the raw data. We also question attempts to draw population directed conclusions from studies of small sample size. Collaboration between the groups who have published would seem a better approach to estimate population characteristics with reasonable accuracy.

References

Dr Haycock comments:
The exact correlation coefficient (r) for the relationship between postconceptional age and creatinine excretion (Ucr.V) per unit weight was 0.187 (n=84), therefore V=82 and the corresponding p value is 0.084 (as could have been obtained by calculation or from statistical tables by any interested reader). Although it may be argued that this is not far short of the chosen significance value (p=0.05), it also allows one to calculate the value of the coefficient of determination (r²) as 0.035; in other words, even if the relationship is 'real', less than 4% of the variability of the dependent variable (Ucr.V.kg⁻¹) is accounted for by the value of the independent variable (postconceptional age), a relationship to which it is difficult to give much physiological weight.

The difference between the values for mean Ucr.V.kg⁻¹ found in our study and those of Sutphen and Modi and Hutton cannot be explained by the difference in mean postconceptional age. The youngest 20 infants in our series had a mean postconceptional age of 210 days, identical to that reported by Sutphen and close to that of Modi and Hutton. The arithmetic and geometric mean and range (mean and two standard deviations on either side of the mean) for these infants were 87-6 (35-6-139-5) and 84-4 (49-4-144-3) μmol/kg/day, respectively, hardly different from the values for the group as a whole and substantially greater than those reported by these other authors. As mentioned in our paper (but not commented on by Modi and Hutton), the differences might also be accounted for,
Correspondence

in whole or in part, by the fact that we factored \( U_{cr} \) by measured weight on the day of study whereas Sutphen factored by birth weight; this could make a substantial difference, particularly in the second postnatal week. Mod and Hutton do not state which weight was used in their series.

The 'meta-analysis' presented by Mod and Hutton (their fig 2) is interesting, and does suggest that across the much greater range of postconceptional age represented in this analysis \( U_{cr} \). kg\(^{-1}\) increases to an extent that might affect clinical calculations for standardising the excretion rate of other substances (to take one practical application of these studies). I continue to believe, however, that in human infants born between 28 and 40 weeks' gestation, in the newborn period, any change in \( U_{cr} \). kg\(^{-1}\) is so small as to be insignificant for clinical purposes.

I note that Coulthard et al\(^2\) reach a conclusion similar to ours, based on their own work; I apologise to them for failing to cite their study,\(^3\) of which we were unaware at the time our manuscript was submitted to the Archives.

References

3 Coulthard MG, Hey EN, Ruddick V. Creatinine and urea clearances compared to inulin clearance in preterm and mature babies. Early Hum Dev 1985;11:11–9.

Rubella immunisation

Sir,

The article by Dr Hodes highlights the problems of uptake rates of rubella immunisation.\(^1\) Her scheme of 'catch-up' seems admirable, but it does seem to miss an opportunity of identifying those previously immunised girls who have not seroconverted.

In some of the family planning clinics where I work, we routinely serotest all women who have not previously had such a test, regardless of immunisation history. It is true that memory for an immunisation given perhaps 10 or more years ago may lead to some of the negatives which we find, but equally there is a recognised failure rate of the immunisation, which is quoted as between 0-5% (P Morgan-Capner, personal communication) and 5%.\(^2\) Some of the failures may be due to faulty storage of vaccine, use of Mediswabs where the skin has not been allowed to dry before injection, and the differing practices of reporting low concentrations of antibody (probably enough to protect the fetus).

Whatever the reason for non-conversion, there must be women walking around believing they are protected because of a history of vaccination who in fact may need a further injection.\(^3\) I seem to turn up one or two a month at family planning clinics in this situation, and we routinely serotest immunised women six weeks after injection. It would perhaps be a more beneficial approach to immunise without serotesting first, and then follow up with measurement of antibody concentrations to check the desired effect has been achieved.

Women in our clinics are given cards providing evidence of immunity and not of immunisation. In this critical area of health, perhaps one could make a special case for the work entailed.

References


ARCHITECTONIC

Croydon Health Authority

A gripe about gripe water

Sir,

Despite lack of evidence that gripe water or any of its ingredients help infantile colic it is prescribed, and many thousands of bottles continue to be consumed each year in Britain.\(^1\)

All gripe waters contain large amounts of sugar, which is harmful to erupting teeth. What concerns us is that certain preparations fail to list sugar on the label, giving the false impression that they are sugar free. Furthermore, all preparations have a widely varying alcohol content, yet alcohol is not listed on the label of some. It is the alcohol that is believed by some physicians to be the active ingredient.\(^2\) When we approached the pharmaceutical industry about these matters we were told that it was only necessary to list 'active ingredients'.

We feel that it is quite wrong that the sugar and alcohol content of these preparations is not always listed on the label and would support the proposal by the Department of Health that regulations should require the disclosure of all ingredients, whether intended as active or not.\(^3\) Since William Woodward first formulated gripe water in 1851 it has always been regarded as harmless—leading to its widespread use as a dummy (pacifier) sweetener.\(^4\) In the interest of preventive dentistry, is the time now not right for the removal of sugar and replacement with an artificial sweetener?

References