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Lengthy appendices

It is an established fact that the appendix is attached to the caecum; however, it is a rare occurrence that the appendix matches the caecum and ascending colon in length. The most recent edition of the *Guinness Book of Records* cites the longest appendix to have been removed as measuring 23.5 cm in length¹; the previous record was 21 cm.² It may be assumed that both these aforementioned appendices were acutely inflamed. I present a case that rivals these two appendices in length. I think that the appendix in this case presented which measured at least 22 cm may be one of the longest appendices encountered, at least in recent times. It was an incidental finding at

Figure 1 One of the longest normal appendices incidentally encountered at autopsy.

autopsy in an 80-year-old who died of unrelated causes (fig 1). However, the claims to fame of these three appendices may be both premature and late. Kelly and Hurdon, in their mammoth work *The vermiform appendix and its diseases* published in 1905, cite the case of an appendix measuring 33 cm in length, presented by F Grauer to the North-Western Medical and Surgical Society in 1890.³

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CORRESPONDENCE

Limitations of transferability of absolute cut-points in non-standardised assays

We read the paper of Matull *et al*¹ on the biochemical markers of acute pancreatitis with much interest. We would, however, like to comment on some aspects that could be misleading.

First, absolute cut-off points as part of diagnosis or risk prediction need to be employed with great care.² This is especially true for enzyme assays such as alanine aminotransferase, aspartate aminotransferase, lactate dehydrogenase and amylase. For example, more than 200 methods of activity determination have been described for amylase.³ Amylase analytical methods vary with respect to the type of substrate and substrate concentration, use of auxiliary enzymes as well as assay conditions such as pH, temperature, incubation period and protein concentration.^{3,4}

Accordingly, reference intervals are method dependent, and it could be confusing to imply that values such as 600 or 1000 U/l have certain clinical sensitivities and specificities¹ without mentioning which analytical methods were employed, what the reference intervals were or that the figures will vary between laboratories owing to a lack in assay standardisation.^{2,4} Reference intervals for amylase range from 90–300 U/l (Phadebas, Magle AB,

Lund, Sweden) through 25–115 U/l (Dimension RxL, Dade Behring, Milton Keynes, UK) to 22–89 U/l (Olympus, Clare, Ireland). Not surprisingly, there are large differences between different assays when results from external quality assessment schemes are examined. The difference between the intermethod reference ranges is so significant that they have been flagged up as a clinical governance issue in some hospitals when changing routine clinical chemistry analysers.

The second, unrelated, aspect on which we wished to comment relates to interferences. Significant increase in serum triglyceride concentrations is a recognised interferent in some assays; however, it is unlikely to be an interferent or a competitive interferent in all 220+ amylase assays^{3–5} due to the inherent differences in assay formulation. Most modern amylase assays are not subject to such problems when the triglyceride concentration is <10 mmol/l.

It also needs to be noted that prognostic criteria such as Ranson and Glasgow are also affected by the above transferability limitations. Direct transfer without validation, especially when assays have not been standardised will lead to avoidable errors in diagnosis and assessing prognosis.

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