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LETTER TO THE EDITOR

Comments on "A variant pattern of Calretinin immunohistochemistry on rectal suction-biopsies is fully specific of short-segment Hirschsprung's disease"

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Dear Editor,

With regard to the paper "A variant pattern of Calretinin immunohistochemistry on rectal suction-biopsies is fully specific of short-segment Hirschsprung's disease" by Guinard-Samuel et al. [1] as mentioned by the authors the variant pattern of Calretinin staining (termed P+ by the authors) had previously been described by Barshack et al. [2] and Alexandrescu et al. [3] to be present in the transitional zone of the bowel in patients with Hirschsprung's disease. The authors hypothesised that P+ staining pattern indicated short-segment Hirschsprung's disease; this theory was based on a single case out of 131 cases in their previous work [4] which happened to have such a staining pattern and a 2 cm length of aganglionosis.

These findings raise several questions. Why is the incidence of P+ staining pattern so different from their earlier work (1/131) compared to this study (18/44)? Could it be that such variant staining patterns were previously not recognised and, therefore, classified wrongly? If the incidence of such a variant staining pattern was what their first paper found, the power of their current study would not be sufficient to conclude on its specificity as a diagnostic tool.

Kapur had previously cautioned on the possibility of type II errors (false negative) when using Calretinin staining as a diagnostic tool in patients with very short-segment Hirschsprung's disease [5]; this is attributed to the proximal segment of aganglionic bowel also staining positive with Calretinin. Instead of the P+ staining pattern indicating short-segment disease, could it instead be that the transitional zone is more likely to be biopsied in short-segment disease? Therefore, leading to an erroneous interpretation that short-segment disease presents with a variant staining pattern.

The possibilities presented in this paper are new and exciting. However, these current findings are not likely to affect the decision making for primary/single stage pull through as surgeons will continue to depend on the availability of intraoperative frozen section on the table for two reasons: viz. the low sensitivity of the above finding and need for 24–48 h before Calretinin reports can be made available. Further work, perhaps with prospective studies, could help in addressing some of the concerns above.

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