Paediatric ASD closure in the United Kingdom; practice vs demographics?

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In March 2013, the NICOR database was interrogated for paediatric ASD closure; from 2009-12. These publicly available data were analysed as a proportion of overall centre activity, & ratios of device vs surgical closure.

+-400 ASDs are closed per annum in the UK and Ireland (6% of total activity). Indications for closure are (in theory) uncontroversial. The ratio of surgical to device closure nationally is 1:1 (0.85 to 1.05). Over the study period, Oxford ceased surgery, Irish practice also changed. These units are therefore excluded. NICOR has recently updated its website but sampling suggests no material changes to this dataset.

There are apparent regional variations in total ASD (surgical + device) closure rates as a proportion of unit activity (3–11%). This is similar year on year with variation around the mean. It appears that ASD closure is less commonly performed in the Midlands and the North-East than other areas. There is wide variation across London.

There is much greater variation between units in the device/surgical ASD closure ratios (0.33:1 vs 5:1). This does not correlate with differences in percentage per unit activity.

Data extraction from CCAD / NICOR public-portal is time consuming. However, even for relatively straightforward lesions, it reveals differences either in demographics or clinical practice which merit further study. Variations may be due to patient differences or team preference; this should be examined with reference to physical and emotional outcomes. Differences in total ASD closure rates may have demographic implications and may skew complexity scoring; this needs further examination.