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Hyponatraemia in children with acute CNS disease: SIADH or cerebral salt wasting?

Child's Nerv Syst (2001) 17:58-63

In the fourth line of the Abstract the word "excretion" should have been "retention." The Abstract and Keywords are therefore reprinted below.

Published online: 12 July 2001 © Springer-Verlag 2001

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Tel.: +49-6221-562311 Fax: +49-6221-565744 **Abstract** Hyponatraemia in patients with an acute central nervous system disease can be caused by two different mechanisms: (1) retention of free water, i.e. the syndrome of inappropriate secretion of antidiuretic hormone (SIADH) and (2) excessive sodium excretion, i.e., the cerebral salt wasting syndrome (CSW). Although the concept of CSW is well known in adult medicine, it is still not established in child neurology. We conducted a retrospective analysis of electrolyte disturbances in 195 children with various acute CNS diseases. In 20 children (10.3%) hyponatraemia with plasma sodium below 130 mmol/l was identified. On the basis of clinical and laboratoty data

7 of these 20 children were diagnosed as having SIADH, and the other 9 children, as having CSW. Our data suggest that hyponatraemia attributable to CSW is at least as frequent in children as SIADH. Because of their different pathophysiological mechanisms, which require diametrically opposed therapeutic regimens, early differential diagnosis is mandatory if the correct treatment is to be given.

Keywords CNS disease · Hyponatraemia · Syndrome of inappropriate secretion of antidiuretic hormone · Cerebral salt wasting syndrome