

Different mechanisms may be operational in this regard. Thus, G-CSF has been shown to augment adenosine diphosphate-induced platelet aggregation *in vitro* and *in vivo* [5, 6]. Accordingly, a decrease in platelet counts has been observed in animals and humans [7, 8], which was dose-dependent and associated with elevated platelet factor-4 serum levels [8]. The dramatic upregulation of the neutrophil-endothelial cell homing receptor (LAM-1) affinity may be another pathogenetic factor [9]. Finally, direct effects on endothelial cell proliferation and migration have been reported [10]. Since these effects may have fatal consequences at sites of pre-existing lesions of the endothelium, specific attention regarding vascular complications during G-CSF therapy may be warranted in similarly predisposed patients.

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Breast Carcinoma Presenting with Inappropriate ADH Secretion

Andrew C. Howard, Robert W. Laing and Fez N. Hussain

A WOMAN PRESENTING with clinical and biochemical water intoxication (serum sodium of 118 mmol/l, potassium 4.6 mmol/l, urea 3.8 mmol/l, a serum osmolality of 250 mOsmol/kg and urine osmolality of 627 mOsmol/kg) was shown to have inappropriate secretion of antidiuretic hormone (ADH). Clinical examination and radiological investigation indicated a breast carcinoma to be the only possible source. Histopathological investigation of the tumour revealed a typical *in situ* ductal breast carcinoma with stromal invasion and regional lymph node metastases. Electron microscopy revealed neurosecretory granules in both primary and metastases, many cells staining positively with an argyrophil stain, and with antibody to ADH (Fig. 1). On removal of this tumour the patient's symptoms resolved and her biochemistry returned to normal. At 12 months she remains well with no local recurrence or evidence of further metastases.

Inappropriate ADH secretion is a rare condition most often associated with bronchial carcinoma, or with organic lesions of the hypothalamus and pituitary gland. We believe this to be the only histopathologically proven case of breast carcinoma causing inappropriate ADH secretion so far reported in the literature.

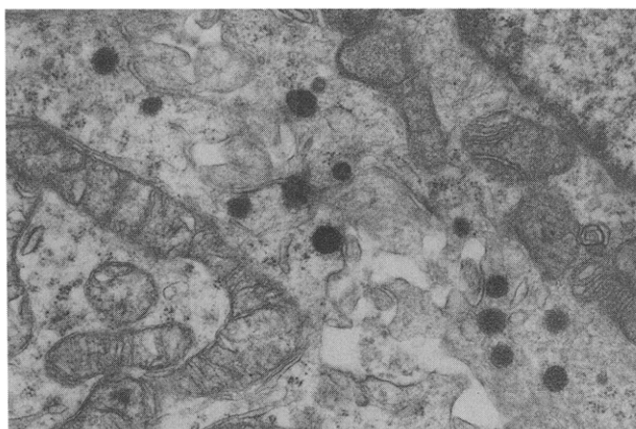


Fig. 1.

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Correspondence to A.C. Howard.

A.C. Howard is at the Department of General Surgery; F.N. Hussain is at the Department of Medicine, Northern General Hospital, Sheffield S5 7AU; and R.W. Laing is at The Department of Neuropathology, Royal Hallamshire Hospital, Sheffield S10 2JF, U.K.

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