was molten. Large pieces of wax were easily lifted from the cut surface without defrosting, but remaining adherent small pieces were removed by placing absorbent paper or cotton on the cut surface and applying a warmed domestic smoothing iron. The tumour relations, the fracture site, the features of the elbow joint cavity, and the presence or absence of intramedullary tumour deposits were studied, recorded, and sampled. An illustrative sample was now available for preservation as a museum specimen. Excellent histological specimens were prepared.

We have since applied this technique to several other amputation specimens and have found it useful in the handling of these awkward specimens.

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Seminal vesicle epithelium in prostatic needle biopsy specimens

Epithelium from the seminal vesicles may be included in prostatic needle biopsy specimens. These epithelial cells sometimes display large bizarre, hyperchromatic pleomorphic nuclei which closely resemble malignant cells. Misinterpretation may result in an erroneous diagnosis of malignancy. The presence of these benign cells, the nuclei of which are almost certainly displaying polyploidy, has been described in published papers¹ and in specialist textbooks.^{2,3} We wish to emphasise the frequency of this occurrence, indicate how often this potential problem may be encountered, and define the feature, which allow it to be distinguished from prostatic carcinoma.

We examined seminal vesicles taken at necropsy from 22 men (table). Polyploidy occurred commonly in older patients, and both the extent and severity increased with age. None of the younger patients showed atypical nuclei, but not all of the older patients displayed polyploidy. Why this change occurs is unknown. Kuo and Gomez

Results of study of seminal vesicles obtained from 22 men at necropsy using extent and severity of nuclear pleomorphism as a subjective indication of polyploidy

Pleomorphism	No of cases	Age range (years) (mean)
+++	5	62-89 (75)
++	9	60-78 (66)
+	2	35-48 (41.5)
None	6	20-79 (51)

found no relation with cancer and suggested a hormonal or degenerative effect due to ageing.¹ In our study two patients aged 78 and 68 also had coincidental prostatic carcinomas, but only the older patient showed polyploidy, which was of mild degree. Arias-Stella and Takano-Moron found no correlation with vascular sclerosis, pigment, prostatic hyperplasia, or atrophy of the testis.⁴

In a review of the 264 prostatic needle biopsy specimens received over the previous 10 years we found that seminal vesicle epithelium was not uncommonly present, being found in 15 specimens (5%).

Seminal vesicle epithelium can be distinguished morphologically from prostatic epithelium by the presence of cytoplasmic and luminal lipofuscin and occasional round eosinophilic stromal nodules. Mitoses are not a feature. Lipofuscin is not, however, always present. Both mucin staining and stains for basement membranes are, in our experience, unhelpful in distinguishing between these two types of epithelium. The immunoperoxidase stain for prostatic

specific antigen appears to be the single most specific method for positively identifying seminal vesicle epithelium in prostatic tissue in the absence of distinctive morphological features (figure).

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- 4 Arias-Stella J, Takano-Moron J. Atypical epithelial changes in the seminal vesicles. *Arch Pathol* 1958;66:761-6.

Immunoperoxidase stain for prostatic specific antigen showing positive staining for prostatic adenocarcinoma and unstained seminal vesicle epithelium at margin. Prostatic specific antigen.