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SIMPLE BONE CYSTS TREATED BY INJECTION OF AUTOLOGOUS BONE MARROW

Sir,

I read with interest the article in the November 1996 issue on simple bone cysts treated by injection of autologous bone marrow by Lokiec et al because the authors attributed their success entirely to the alleged osteogenesis from the injected cells. They ignore the possibility that, in their technique, the trauma to the cyst wall may play an important, if not crucial, role in the subsidence of the lesion. This possibility, which has been mentioned in the literature at least twice, cannot be dismissed. The authors' technique, including, as it does, the use of a cannulated needle and a trocar, with "multiple perforations through the cyst wall" and an instruction to "break all the intraluminal septa" is not "almost atraumatic". As has been suggested, it may instigate formation of new vascular channels, previously impeded, which will allow continuous drainage of the cyst.

If this is the explanation of the success of their technique, the relevance of the autologous precursor cells is questionable as has been that of the steroids now being used locally. At least neither is used to disrupt the lining membrane and make multiple perforations through the cyst wall.

J. COHEN, MD
Francis Children's Hospital
Boston, USA.


Sir,

We read with interest the article by Lokiec et al. in the November 1996 issue concerning the treatment of simple bone cysts by percutaneous autologous marrow grafting. The aetiology of simple bone cysts (SBC) is unknown. It has been suggested that they occur after trauma due to failure of absorption of an intraosseous haematoma. Based on the electron-microscopic analysis of cyst membranes Mirra et al. believe that the cysts represent an interosseous synovial cyst. High levels of oxygen scavengers have been isolated in cyst fluid and implicated in the associated bone destruction.

Others believe that the cyst represents the inability of the interstitial fluid to escape from the bone due to blockage of the venous drainage system. Ekkernkamp, Muhr and Lies and Chigira et al. have directed treatment toward decreasing the intraosseous pressure, successfully employing decompression by a cannulated screw or multiple cortical perforation.

The operative technique used by Lokiec et al. also included "disrupting the lining membrane and making multiple perforations through the cyst wall".

We think that it is likely that the healing achieved by Lokiec et al. is influenced by or is the result of the multiple perforations made in the wall of the cyst.

H. W. B. SCHREUDER, MD
R. P. H. VETH, MD
Academic Hospital
Nijmegen, The Netherlands.


Author's reply:

Sir,

We appreciate very much the interesting comments and points raised by Dr Cohen and Drs Schreuder and Veth. Both letters address a similar point regarding the possible effect of multiple perforations through the cyst wall. We thank them for allowing us to explain again the technique in order to prevent misunderstandings. The cortex of the cyst is perforated only once with a thin cannulated needle and a trocar, with "multiple perforations through the cyst wall" and an instruction to "break all the intraluminal septa" is not "almost atraumatic". As has been suggested, it may instigate formation of new vascular channels, previously impeded, which will allow continuous drainage of the cyst.

We found the review by Tscherne and Negel in the September 1996 issue most informative.

S. WIENトROUB, MD
Dana Children's Hospital
Tel-Aviv, Israel.

CARE OF THE POLYTRAUMATISED PATIENT

Sir,

We found the review by Tscherne and Negel in the September 1996 issue most informative.