No Case Against Mohs’ Surgery

Sir,

Shuster (1) questions the value of Mohs micrographic surgery (MMS) based on his review of published literature and scepticism about the motives for undertaking this technique.

We write in defence of MMS, which we find a supremely logical approach to the excision of tumour growing in-continuity. Our comments are based not on published literature, but on experience and observation of treating hundreds of tumours with and without MMS.

Shuster appears to assume that basal cell carcinomas (BCCs) are homogenous; they are not, and failure to appreciate this is fundamental to his misconceptions.

A majority of BCCs are solitary well-defined tumours with an expansile growth pattern and smooth regular borders. Such tumours create clearly visible changes on the skin surface and have a close correlation between the clinically visible margin and the underlying tumour. These tumours can be treated by a variety of techniques, such as surgical excision, which rely upon the clinician’s visual assessment of the skin surface.

A minority of BCCs, however, are composed of fine cords of tumour cells infiltrating the dermis, but creating very little change in the overlying skin surface. Although less common, these BCCs account for the majority of our MMS service and for the majority of “recurrences”. There is considerable discrepancy between the clinically visible surface margin of these tumours and the underlying tumour infiltration, which, not infrequently, may extend for a further centimetre. These tumours grow eccentrically from their origin and it is impossible accurately to direct treatment without the comprehensive histological mapping offered by MMS. If inadequately treated it is often many years before there is any clinical evidence of recurrence, by which time many patients have long since been discharged from follow-up. It is not uncommon to wait 7 or 10 years before these “recurrent” tumours are seen, and at such time they are found to infiltrate widely into the surrounding tissues, having grown continuously over the period. This observation lends no support to Shuster’s belief that the body is able to destroy residual BCC.

The goal for surgical excision of skin malignancy is to remove the tumour in its entirety, after which there will be no recurrence. The challenge is to identify infiltrative BCCs and treat them appropriately, usually by MMS.

Shuster comments upon the increasing popularity of MMS and its use for smaller BCCs and in cosmetically important sites such as the central face. This can only be a natural consequence of the global quality movement. Given the alternatives of knowing immediately that the tumour has been completely removed with minimum sacrifice of normal tissue, or that the tumour may have been inadequately treated, perhaps undetected as such, and may later recur, it is only to be expected that MMS would be the preferred choice of the informed patient.

Much has been made of published studies of BCCs in which conventional “breadloaf” microscopic sections have been examined. To paraphrase one of Shuster’s sayings “this is about as accurate as trying to describe a room by looking through the keyhole”. Any conclusion drawn from microscopic examination of conventional histological sections is totally dependent upon an assumption that the tissue sampled is an accurate representation of the whole, i.e that the tumour is growing in a discrete mass. MMS requires no such assumption and this explains its success.

Enough has been written about the theoretical aspects of MMS. Its opponents seem invariably to have no personal experience of the technique. As one of our foremost experimental dermatologists, Shuster should put down his pen, pick up his scalpel and start making his own observations. For those who prepare the tissue and read the slides, MMS is not only an invaluable technique, but an education into the biology and growth patterns of the most common human tumour.

REFERENCES


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