

The answer lies in greater dental awareness and motivation of both patients and their carers, making full use of dental hygienist and dental health education facilities. Prevention is always far better than cure. Whatever is planned, it is important to recognise the oral health care needs of each individual by screening their present oral health status.

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Importance of bladder biopsies in spinal paralysed individuals (SPI)

Van Velzen and colleagues¹ compared histopathological findings of urinary bladder biopsies from the dome and the trigone in SPI. Their results showed different pathological lesions in the dome and trigone and indicate the importance of constant surveillance.

Recently we published² histopathological results of bladder biopsies of 32 para- and tetraplegics which were treated at the Swiss Paraplegic Center in Nottwil nearby Lucerne. The mean age of our collective was 42 years (range 17–73 years) and the mean time of spinal cord lesion was 11 years (range 5 months–41 years). The male/female ratio was 31:1. Each patient suffered from multiple urinary tract infections between one and six times a year. All bladder mucosal biopsies were taken from the trigone during urological endoscopic operations. Histopathological examination of these specimens proved pathological alterations in the lamina propria in 30 cases. There was chronic inflammation in 22 cases, a subacute inflammation in eight cases, a suburothelial fibrosis in 16 cases and edema in four cases.

In contrast to Van Velzen's results we did not observe metaplasias of the urothelium. We suspect that there is a correlation between the pathological alterations in the lamina propria and the so called low-compliance bladder in SPI. For this reason bladder biopsies during cystoscopy should be an essential part in the annual follow-up examinations of spinal paralysed individuals.

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Reply from Dr S Vaidyanathan and Mr KR Krishnan

We thank Dr Janzen and colleagues for bringing to the attention of the readers of *PARAPLEGIA* their excellent contribution on 'Importance of bladder biopsies in spinal paralysed individuals'. We are pleased to know that Janzen and associates also recommend that bladder biopsies during cystoscopy should be an essential part in the annual follow-up examinations of spinal paralysed individuals. However, in their study, all bladder mucosal biopsies were taken only from the trigone, and as shown by us, single site biopsy may not be diagnostically adequate even in those patients who do not have any cystoscopically distinguishable lesion in the urinary bladder.

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Association between muscle trauma and heterotopic Ossification in spinal cord injured patients

The paper by Snoecx *et al*¹ is extremely valuable in delineating the relationship between heterotopic ossification and tears of the muscle in paraplegic patients.

It is not clear from their paper what they consider to be the causative factor in these tears. The onset came on between one and eight months of injury when they state the patients were undergoing an active programme of rehabilitation: 'all were in the stage of intensive rehabilitation and transfer activities'.

What was the relationship between the tears and passive movements of the lower limbs? Although the paper says the tears were in the psoas, were they a transverse tear or a longitudinal tear? If we knew this we would be able to relate the tear to the direction of the movement.

The reason I ask this is that in 1969² I postulated, on the basis of five patients, that there was a striking relationship of heterotopic bone formation to passive movements and trauma and I wrote: