Dr Mukerji replies as follows:

I am well aware of the work done by the authors (references 1-5 above) on twitching motility and fimbriation of *A. anitratus*. The authors, however, have failed to appreciate my observation regarding the peculiar "pendular type" of motility detected in batch 2 of NCTC 7844 (strain of Schaub and Hauber) which was characteristic of a myxobacterium. Two subsequent batches did not show the same activity, probably because this property was affected by cell wall injury caused by freeze-drying. However, they did develop surface gliding movement and other fresh isolates showed flexion and extension motility on our medium. I hope the authors will agree that fimbriae did not produce the latter type of movement? There is other evidence to support NCTC 7844 being a myxobacterium. It secreted viscous gum and showed the characteristic capacity to penetrate soft agar in Stanier's salt agar base on testing for cellulolytic and proteolytic activities. For the former, strips of filter paper were put under the surface of agar and the strain inoculated over the strips. In 2-3 days the strains secreted viscous gum, produced etching around the growth and assumed rod-like morphology with a refractile outline which failed to stain well with Gram's. For proteolytic activity 0-1% skimmed milk was incorporated in the agar; the strain produced superficial pitting of the agar and etching phenomena outside the growth. This occurred within 3-5 days which suggested the capacity of the cells to penetrate soft agar (1%). These findings suggest that NCTC 7844 is a myxobacterium. This could be confirmed by hybridisation experiments with myxobacteria but as far as I know these experiments have not been carried out.

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References

**Necrotising granulomatosus prostatitis after transurethral resection**

We enjoyed the recent article published in the September issue of your Journal by Lee and Shepherd. We would like to add our experience of two cases who also had transurethral resection for benign prostatic hyperplasia and who later had recurrence of obstructive symptoms. Material removed at the second transurethral resection showed an identical histological picture to that described by Lee and Shepherd (Figure) and there was also no histological or clinical evidence of other causes of localised or generalised granulomatosis. However, tissue eosinophilia which was mentioned first by Hedelin et al was not a feature in our material. It is of interest to note that the time interval of finding active necrotising granulomata was very variable and in our second case (Table) was after eight years.

As we also support their contention that these granulomata, which bore a striking resemblance to rheumatoid nodules, are the effect of trauma, we would like to postulate that they are related to tissue necrosis caused by diathermy in the initial transurethral resection procedure. The persistence of these necrotising granulomata for a very long time, as in our second and their first case, together with a striking resemblance to rheumatoid nodules, would support the speculation that tissue necrosis is the cause of this reaction as it was hypothesised in the evolution of genuine rheumatoid nodules.

We think by now there is enough evidence in the literature to suggest that the relation of transurethral resection and necrotising granulomatous prostatitis is constant and hope that it will prevent further unnecessary investigations and in some cases empirical antituberculous treatment of the patients in question.

**Time intervals between first operation (no granuloma) and second operation (granuloma found) in two cases**

<table>
<thead>
<tr>
<th>Age (yr)</th>
<th>Operation 1</th>
<th>Operation 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Transurethral resection—no granuloma</td>
<td>Transurethral resection—granuloma found</td>
</tr>
<tr>
<td>65</td>
<td>78</td>
<td></td>
</tr>
</tbody>
</table>

Interval between first and second operation 3 months 8 yr

A large necrotising granulomatosus reaction bordered by a pallisading layer of histiocytes (arrows) and a few multinucleated giant cells (arrow heads). Haematoxylin and eosin x70.
Blood culture symposium

The blood culture symposium in the September 1983 issue of the Journal is of interest. However, may I comment on one aspect of the contribution by BJ Duerden on the clinical significance of bacteraemia (p 964). Isolation of Salmonella typhi from the blood of a pyrexial patient is undoubtedly of significance in establishing a diagnosis of acute typhoid fever. However, although not overtly stated, the impression is given that isolation of Salm typhi from blood always has such significance. This is far from being true. Salm typhi may be recovered from whole blood or blood clot cultures in patients suffering from other disease states and from individuals without symptoms. Such transient bacteraemias occur in typhoid carriers who are intravascular shedders of the organism, probably derived from reticuloendothelial sites where a stable host-parasite relationship has been established. Many of these patients do not excrete organisms either in faeces or in urine. The bacteraemia is not associated with pyrexia and indeed it is quite common to isolate Salm typhi from blood of patients with typhoid fever who are convalescent, apyrexial and symptom free. It is probable that intravascular shedding of organisms from such sites is much more common than is realised simply because routine blood cultures are not done on potential typhoid carriers.

Experimental animal models in mice infected with Salm typhimurium show that an analogous situation exists in this host-parasite relationship.

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References

Letters to the Editor

Similar pathological features were seen in bladder, occasionally in repeat transurethral resection specimens but more commonly in cystectomy specimens. Again cases with a recent resection had appearances which could be mistaken for eosinophilic cystitis whilst those seen a month or more later often had necrotising granulomata superficially resembling tuberculosis. I am unable to explain the presence of large numbers of eosinophils in the early lesions although I have noted a comparable histological appearance in resections of rectum in which there has been previous sigmoidoscopic biopsy. It is also interesting that in a recent study of eosinophilic cystitis muscle necrosis was a prominent feature and many of the cases had had previous operative interference.

Second transurethral resections of prostate are usually indicated by persistence of obstructive symptoms (possibly due to inadequate initial resection by junior staff) whilst in the bladder it often occurs at repeat endoscopy for persistent haematuria. In this situation exuberant granulation tissue may simulate tumour and care has to be taken not to be bullied into this diagnosis by aggressive urologists. The relative frequency of these iatrogenic lesions in transurethral resection specimens underlines once again the importance of adequate data storage and retrieval in histopathology departments. It is not good enough to rely on the clinician to provide information of previous histological specimens and only when departments have systems capable of automatically retrieving previous reports (with or without sections) on all cases coming to reporting will possible errors in diagnosis like those described above be avoided.

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References
Necrotising granulomatous prostatitis after transurethral resection.
N Y Haboubi, M K Khan and H H Ali

J Clin Pathol 1984 37: 103-104
doi: 10.1136/jcp.37.1.103-b

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