Reviewer’s report

Title: A comparative study of cytokeratin 20 immunostaining in the urothelium of (1) normally-innervated bladder with transitional cell carcinoma, (2) normally-innervated bladder of individuals with cystitis, and (3) neuropathic bladder of patients with spinal cord injury

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Reviewer: Dr J Rao

Level of interest: A paper whose findings are important to those with closely related research interests

Advice on publication: Accept after discretionary revisions

This is entirely a descriptive type of study, however, it provides some useful clinical information. The study demonstrated that a decreased CK20 expression in bladder umbrella cells in patients who had neuropathic bladder after spinal cord injury. It confirmed other people's finding of an increased CK20 expression in transitional cell carcinoma. Since the formal groups of patients usually have increased risks to develop malignancy, monitoring these patients with CK20 staining in either urine or tissue samples might provide a means of cancer early detection. However there are several issues that need to be addressed:

1. Although there are findings to suggest that CK20 is a marker for terminal differentiation of urothelial cells, one needs to be cautious to draw a conclusion based on CK20 alone, especially in view of the fact that dysplastic or malignant urothelial cells are also positive for CK20.

2. It may still be interest to include the results of CK20 staining in the metaplastic squamous cells, either a positive or negative finding will be a useful information.

3. Statistic analysis should be added.

4. The title seems to be too long and too descriptive.

Competing interests:
None declared.