

Patient Safety Bulletin

What is the prostate doing in the bladder?

What happened and what were the issues/implications?

A usual bladder biopsy was received for a cystoscopic abnormality. Under microscopy, the sample had a papillary urothelial tumour, non-invasive, with a very good prognosis. The underlying bladder lamina propria, however, was expanded by foamy acini, looking like prostatic tissue. The patient had no known history of prostate cancer and it was not clinically suspected. It was thought that, since the bladder tissue had what looked like prostatic acini, then this must have been an occult cancer metastasizing. The only concern was to prove that it was prostatic tissue and not related to the bladder. It was prostate-specific antigen positive and was identified as metastatic prostatic adenocarcinoma.

Later, when the case was being reviewed by the multidisciplinary team (MDT), the reviewing pathologist thought something did not add up. Firstly, the request form only mentioned a small bladder tumour noted on cystoscopy; if there was metastasizing cancer, the bladder should look a lot more abnormal. Secondly, going through the electronic records of the patient, the CT only showed a mildly enlarged prostate and the patient did not complain of obstructive symptoms.

Basal cell markers were requested, which were positive, confirming that, in fact, it was benign prostatic tissue. Digging deeper, this was concordant with ectopic prostatic tissue in the bladder – a rare diagnosis with less than 50 reported cases in the English literature, which is usually seen in the trigone and the interureteric ridge, which was the exact site of the biopsy in this case.

What actions were taken?

Luckily, no patient harm happened, since the report was amended prior to being viewed by the MDT. However, this was a near miss, so it was recorded.

What did you learn?

If what you are seeing does not add up with what is clinically described, stay vigilant and assume that you are ignorant in certain respects. Before authorising such reports, dig deeper and show the case around.

It was also very interesting to realise the range of sites that can harbour ectopic prostatic tissue. In addition to the bladder wall, it was reported in the perineum, the retrovesical space and various gastrointestinal tract sites, mostly in the rectum. As crazy as it may seem, it has also been reported in various parts of the female genital tract, particularly the cervix. One case report even mentioned ectopic prostatic tissue in an intradural lipoma! Apparently, this dates back to the time of embryogenesis, where it is driven by defects in the formation of the cloacal dividing membrane, which separates the cloaca into an anterior urogenital membrane and a posterior anal membrane.

How was the learning shared?

The case was discussed in the bi-monthly departmental meeting as a possible pitfall to be aware of.

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