Adenocarcinoma of the Urinary Bladder: A Diagnostic Dilemma

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Adenocarcinoma of the bladder (BA) accounts for less than 2% of bladder cancers and includes primary adenocarcinoma of the bladder (PA) and secondary deposits of an adenocarcinoma (SA). One-third of the PA arise from urachal remnants. Therefore, PA are categorized as urachal (UA) and non-urachal adenocarcinomas(NUA). SA are mostly of colonic or prostatic origin in males. A 26 year-old male presented with painless haematuria. Ultrasound scan and contrast-enhanced CT showed an irregular polypoidal growth arising from the anterior superior bladder wall. Transurethral resection of the bladder tumour revealed fibro-vascular papillary cores lined by columnar mucinous epithelium. Glandular structures infiltrated the muscularis propria. The transitional epithelium was absent. This histology was in keeping with a BA. Immunohistochemistry of tumour was Ecadherin and CK20 positive. CK 7 was focally positive and PSA was negative. Based on the immunohistochemical profile, this was a PA. This was further supported by serum PSA, CEA, Colonoscopy, and whole-body PET CT which excluded a secondary adenocarcinoma. Subsequently, a partial cystectomy (including urachal remnant) was done. This showed the absence of residual tumour and absence of other bladder pathologies. UA was differentiated from NUA using diagnostic criteria set by the MD Anderson Centre in 2006. The staging was done using the Sheldon staging system. Accordingly, this tumour was diagnosed as a urachal adenocarcinoma of the bladder, stage III. BA has similar histological and immunohistochemical features. Differentiating the different subtypes is essential for patient management. This case highlights the importance of using multiple diagnostic tools in overcoming these diagnostic challenges.

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