MALIGNANCIES IN AUGMENTATION CYSTOPLASTIES: A REVIEW

Hypothesis / aims of study

Most patients with small capacity, high pressure poorly compliant bladders can be managed successfully with conservative or pharmacological measure. The use of botulinum neurotoxin has also had a significant impact on the management of over-active bladder syndrome. Surgery in the form of bladder augmentation using bowel segments remains a last resort. Augmentation cystoplasty has potentially significant early and late complications – none more worrying than the risk of malignant change within the augmented bladder. The aim of this poster is to provide an update on the literature concerning the risk of neoplasia in bladder augmentation.

Study design, materials and methods

Information for this review was obtained by using a MEDLINE search and then cross-referencing all retrieved articles. Previous review articles were analysed to try to obtain all reports of neoplasia within augmentation cystoplasties.

Results

To date there have been 75 reports in the literature of neoplasia occurring after bladder augmentation: 45 cases in ileocystoplasties, 19 cases in caecocystoplasties and 11 cases in gastrocystoplasties. 47/75 patients had evidence of adenocarcinoma or elements of adenocarcinoma in their histology making it the predominant type of cancer arising from bladder augmentation. 4 cases showed benign histology after biopsy or resection. Other histology’s seen include transitional cell carcinoma, squamous cell cancer and leiomyosarcoma.

Interpretation of results

To date, seventy-five cases of neoplasia have been described in augmentation cystoplasties in the literature. Rather worryingly this could be just the tip of the iceberg as this is now such a recognised complication that these occurrences do not warrant case reports, therefore the true number could be substantially higher. The pattern of tumour formation in bladder augmented with enteric segments seems to be similar to that in ureterosigmoidostomy. The risk of cancer formation in augmented bladders still remains a controversial topic. Given the number of cancers published in the literature we feel that screening these patients is necessary and we would advocate yearly cystoscopic surveillance beginning at 5 years following augmentation.

Concluding message

The malignant potential of augmentation cystoplasty and the need for regular cystoscopic surveillance remains controversial in reconstructive urology. Significant numbers of malignancies have been reported in the literature, the true incidence may be higher due to under reporting. We feel that there is a risk of malignant transformation and would suggest yearly surveillance cystoscopy to monitor this often complicated group of patients.

Specify source of funding or grant none
Is this a clinical trial? No
What were the subjects in the study? NONE