

What's new in bladder cancer research?

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Administration of total parenteral nutrition does not impair long-term oncological outcomes, but negatively affects long-term bowel function after extended pelvic lymph node dissection, radical cystectomy, and urinary diversion.

A randomized, single-centre, single-blinded trial was conducted in 157 consecutive patients who underwent extended pelvic lymph node dissection, radical cystectomy, and ileal urinary diversion.¹ The goal of the study was to determine the long-term oncological and functional outcomes of postoperative total parenteral nutrition (TPN) in this population. Patients were randomly assigned to receive either postoperative TPN within 24 hours of their operation (n=74) or oral nutrition alone (n=83). Patients receiving oral nutrition alone had more favourable long-term bowel function at three and 12 months compared with those who received TPN. There was no difference in oncological outcomes between the two groups, including overall survival (OS), cancer-specific survival, recurrence-free survival, and local recurrence-free survival. However, malnutrition was associated with poor postoperative outcomes in both groups and postoperative TPN did not demonstrate any benefit over oral alimentation alone in the malnourished group of patients. Therefore, while administration of TPN does not appear to impair long-term oncological outcomes after extended pelvic lymph node dissection, radical cystectomy, and urinary diversion, postoperative TPN appears to negatively influence long-term bowel function. Its use should, therefore, be limited to a highly selected cohort of patients.

Continuous saline bladder irrigation is non-inferior to a single installation of mitomycin C after transurethral resection for the treatment of non-invasive bladder cancer

Following transurethral resection for the treatment of non-invasive bladder cancer, intravesical chemotherapy is generally recommended to reduce the risk of recurrence. Sugino

and colleagues from Japan hypothesized that continuous saline bladder irrigation (CSBI) following transurethral resection of the bladder (TURB) might be an alternative option for preventing early recurrence by preventing free tumour cells from implanting in the bladder wall.² They conducted a randomized, prospective study of 224 patients with primary low- to intermediate-risk tumours (TaT1, G1/G2) —113 were assigned 18–22 hours of CSBI and 111 received immediate installation of mitomycin C following TURB. CSBI was found to be non-inferior to mitomycin C with respect to both progression-free survival and recurrence-free survival (Fig. 1). CSBI is easy to administer and avoids the side effects associated with chemotherapy. Although limited by the single-centre nature of the study, these are promising results showing that CSBI may be a valid treatment option for low- to intermediate-risk patients with non-invasive bladder cancer following TURB.

BK and JC polyomaviruses have a potential etiological role in bladder cancer

It has long been suspected that bladder cancer might have an infectious etiology, with Merkel cell virus (MCV), and the BK and JC polyomaviruses put forth as potential candidates. The Spanish Bladder Cancer Study evaluated antibody responses against MCV, BKC and JCV in 1135 patients with incident bladder cancer from five Spanish regions and 982 hospital controls matched by sex, age, and region.³ A similar seroprevalence was seen between cases and controls for all of the viruses tested. However, among those who were found to be seropositive, patients with bladder cancer had a higher median seroreactivity to BKV (0.84 vs. 0.70; p=0.009) and MCV (1.81 vs. 0.65; p<0.001). When the highest and lowest tertiles of seroreactivity were compared, an increased risk of bladder cancer was observed for BKV (OR 1.4, 95% CI 1.04–1.8) and MCV (OR 1.5, 95% CI 1.2–1.9), but not for JCV. The associations of BKV and MCV were independent of each other, and were also independent of smoking status, disease stage, and disease grade. The potential etiological role of BKV and MCV polyomaviruses in bladder can-

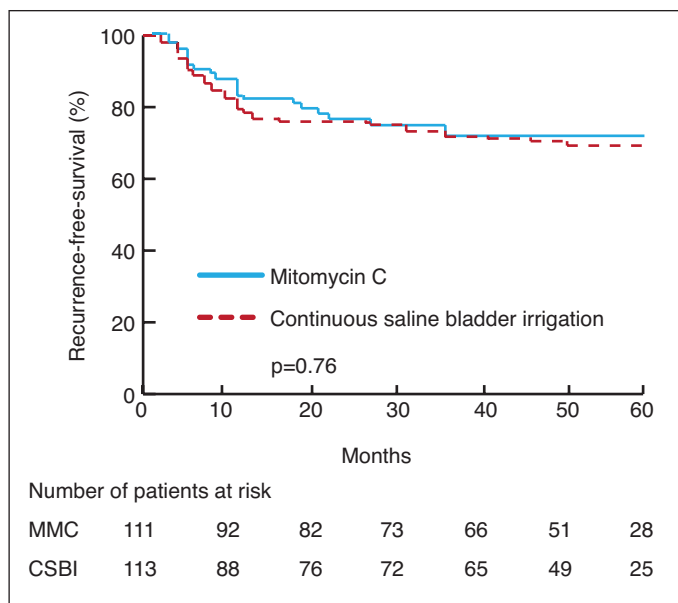


Fig. 1. Recurrence-free survival among patients treated with either 18 hours of continuous saline bladder infusion or immediate installation of mitomycin C following transurethral bladder resection.²

cer warrants further exploration, on both a molecular and epidemiologic level.

References

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