

**B76**

**Are hip fractures under-reported in patients with locally advanced anal cancer treated with chemoradiation (CRT)?**

B Sizer<sup>1</sup>, K Madhavan<sup>1</sup>, P Conn<sup>2</sup>, T Arulampalam<sup>2</sup>, R Motson<sup>2</sup>

<sup>1</sup>Essex County Hospital, Colchester, United Kingdom; <sup>2</sup>Colchester General Hospital, Colchester, United Kingdom

Osteonecrosis of the femoral head or neck is a serious but rare complication of pelvic radiotherapy, and may be increased by concomitant chemotherapy.

We have performed a retrospective review (1998- 2004) of patients (pts) with locally advanced anal cancer. Standard CRT as per UKCCCR ACT 1 protocol: 45Gy/ 25 daily fractions to primary and inguinal nodes, using parallel opposed fields, with concurrent 5FU/Mitomycin C, followed 4-6 weeks later by Phase 2 radiotherapy alone, using planned fields to primary only, 16-20 Gy/8-10 fractions.

23 pts identified, 16 female, median age 64 years (range 49-92), anal canal16: margin 7. Staging T2:8, T3:10, T4:5; 21 clinically N0, 1 pt N2, 1N3. 2 patients underwent elective AP resection after phase I CRT, both for T4 disease (1 with almost histological CR); 1 pt declined phase 2, 1 pt received small volume planned fields only in view of previous adjuvant radiotherapy 12 years before for Duke's C rectal carcinoma, 1 immunosuppressed pt given radiotherapy alone.

18 patients received both phases, 1 of whom (T3N3) also received bilateral groin irradiation with electrons. This pt and 1 other, both female, developed symptomatic unilateral hip pain (incidence 2/18, 11%), and required hemiarthroplasty for FHO (8 months and 1 month respectively post CRT); both pts also needed prophylactic pinning contralaterally after screening MRI. One pt required defunctioning colostomy (overall colostomy-free survival 20/23, 87%). All patients remained disease-free locoregionally, 1 pt died of dissemination.

The incidence of femoral osteonecrosis after CRT may be under-reported, with elderly females at greatest risk.