Cervical cancer: intravesical hyaluronic acid for preventing acute radiation cystitis

Fajardo Paneque I, Sosa Fajardo P, Salvador Garrido N, Taboada Valladares B, Ramos Hernández JA, González Patiño E.
Servicio de Oncología Radioterápica. Hospital Clínico Universitario de Santiago de Compostela

Aim

Intravesical hyaluronic acid (IV-HA) has proved efficacy in preventing acute radiation cystitis (RC), although no randomized studies exists. We report our experience using intravesical instillations of low molecular weight hyaluronic acid sodium salt (Uromac®) to prevent RC in patients with cervical cancer treated with concomitant radiochemotherapy + high-dose-rate brachyterapy (HDR-BT)
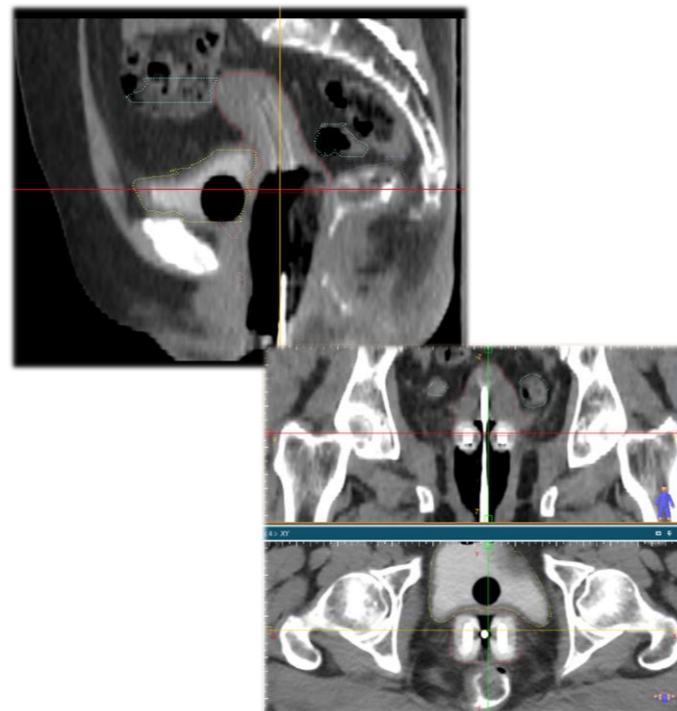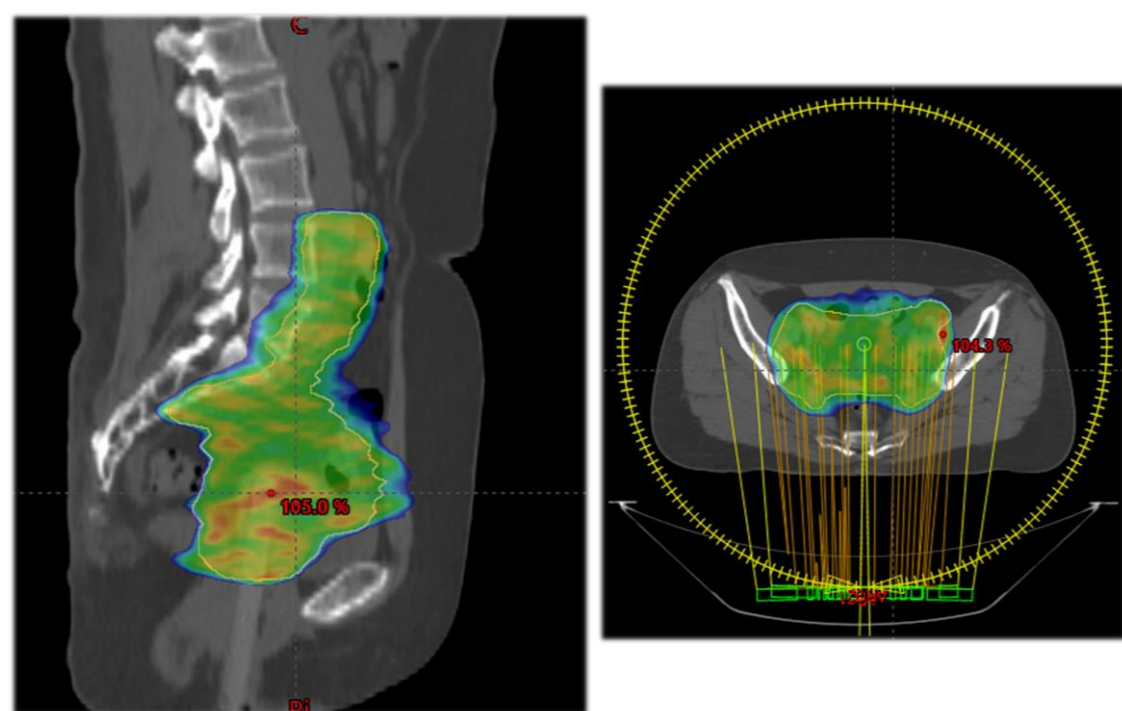
Patients & methods

Between March 2012- April 2015, 30 cervical cancer patients underwent radiochemotherapy
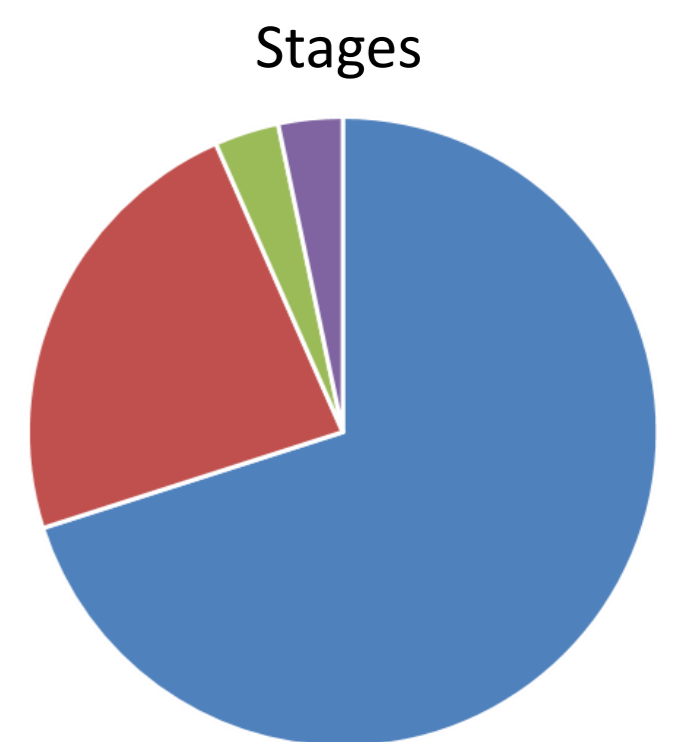
→ Median age: 56,5 years old (range 34-87)

→ Stages
- I: 1 patient
- II: 21 patients
- III: 7 patients
- Vaginal recurrence: 1 patient

Stages

Treatment:

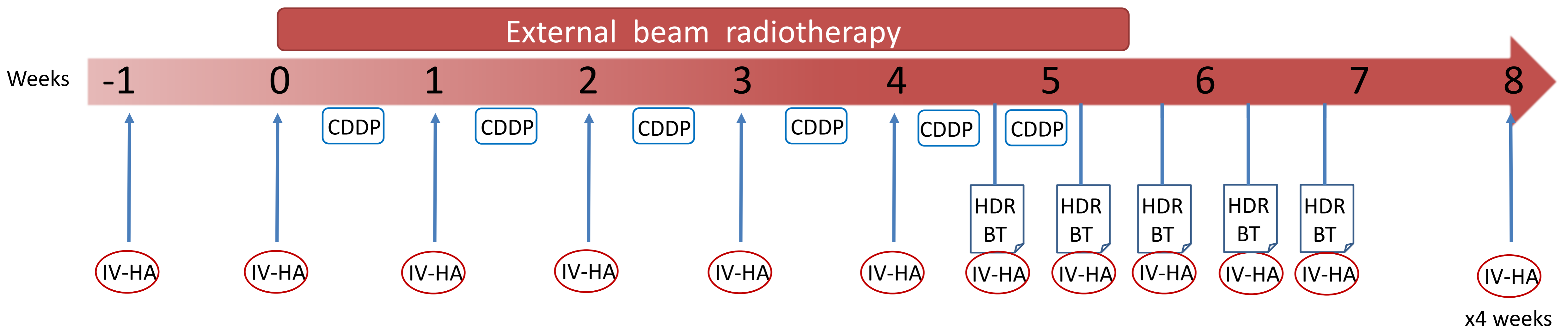EBRT 45-50,4 Gy (1,8 Gy/fr) + concurrent weekly cisplatin ✚ HDR-BT 5,5 Gy x 5 fr

· 23 patients (73,6%) completed treatment
· 4 patients (13,3%) received EBRT 65,3 Gy + weekly cisplatin
· 3 patients (10%) did not complete treatment and have not been evaluated

IV-AH (100 mg/50 ml) administration

1) One instillation one week before starting treatment
2) Weekly instillations during EBRT
3) One instillation before each HDR-BT fraction
4) Weekly instillations in the following four weeks after the treatment finishes
Median instillations: 15 (range 9-17)
Urinary toxicity was evaluated before each instillation according to RTOG/EORTC scale

External beam radiotherapy

Weeks: -1 0 1 2 3 4 5 6 7 8

CDDP (at weeks 1, 2, 3, 4, 5, 5)
HDR BT (at weeks 5, 5, 6, 6, 7)
IV-HA (at weeks -1, 0, 1, 2, 3, 4, 5, 5, 6, 6, 7, 8)
x4 weeks

Results

11 patients (36,6%) developed grade I toxicity
2 patients (6,6%) developed grade II toxicity
No grade III or IV toxicities were registered
No urinary complications associated with bladder catheter or IV-HA side effects were recorded

Toxicity

Grade II — Grade I — No toxicity
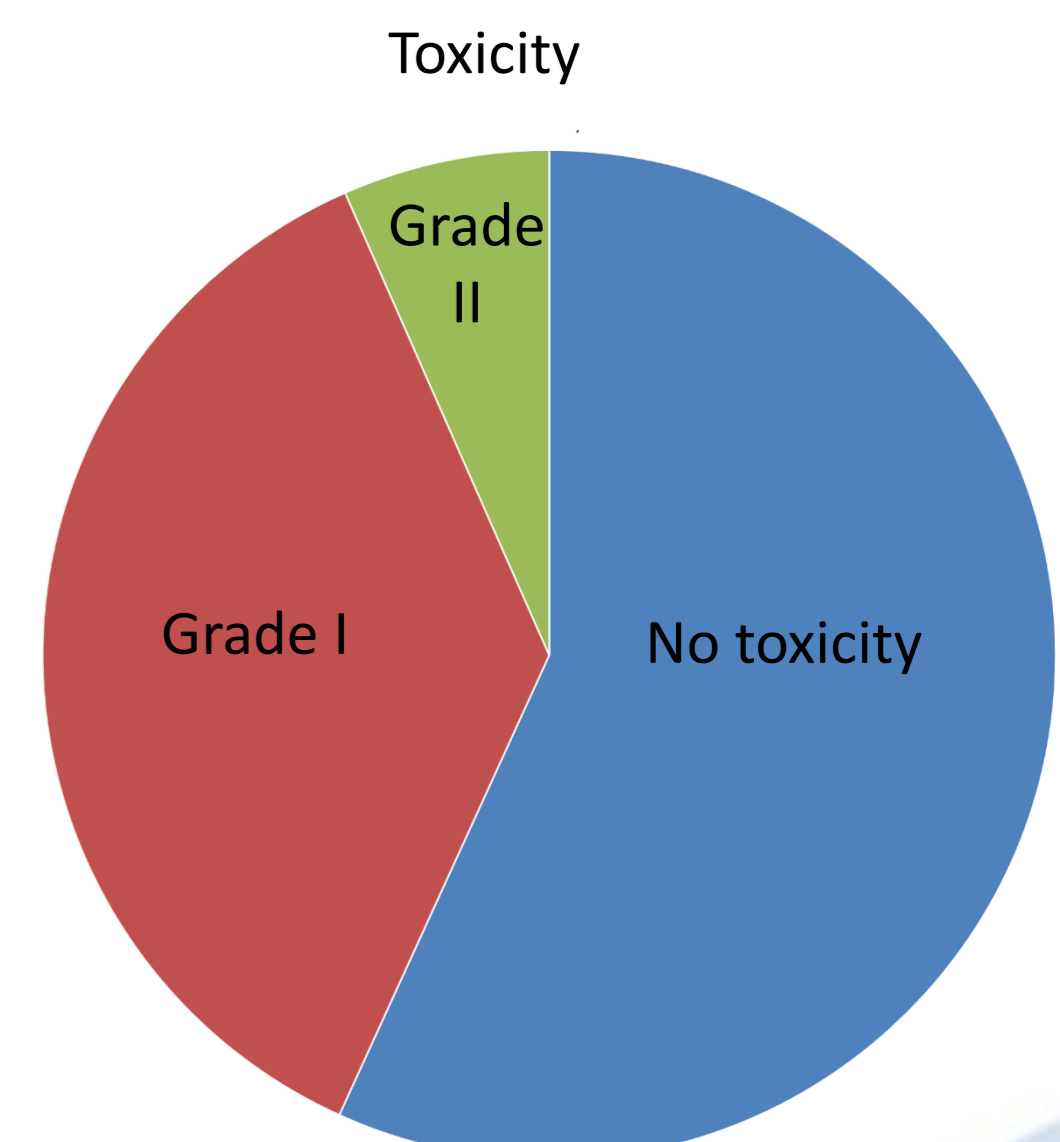
Conclusions

Although prospective studies are needed, IV-HA seems a safe and effective treatment preventing acute RC and helps to finish treatment in the scheduled time