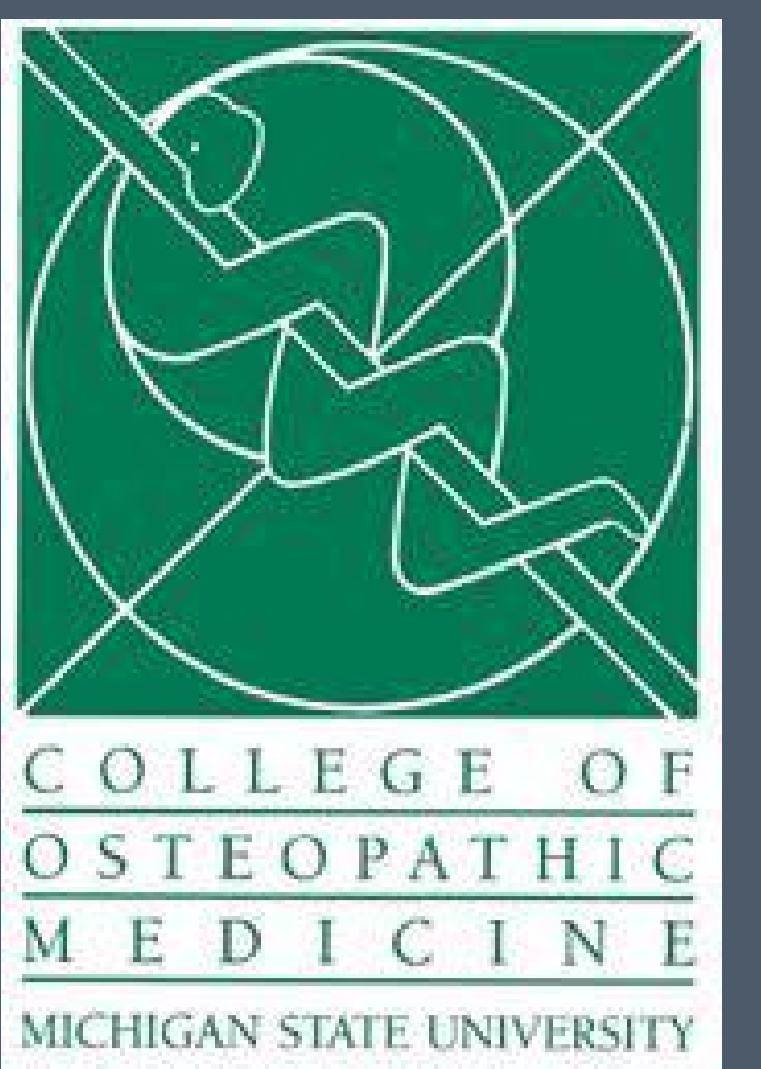




Incidence and Morbidity of Radiation-Induced Hemorrhagic Cystitis in Prostate and Bladder Cancer

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BACKGROUND

- Hemorrhagic cystitis (HC) is a complication of pelvic radiation.
- Reported Incidence of ~5%; however these studies do not take into account that HC increases with time.
- Despite improvements in radiation, series have shown significantly lower rates of GI but not GU toxicity.
- Morbidity and complications of HC have yet to be fully assessed in the literature.

OBJECTIVES

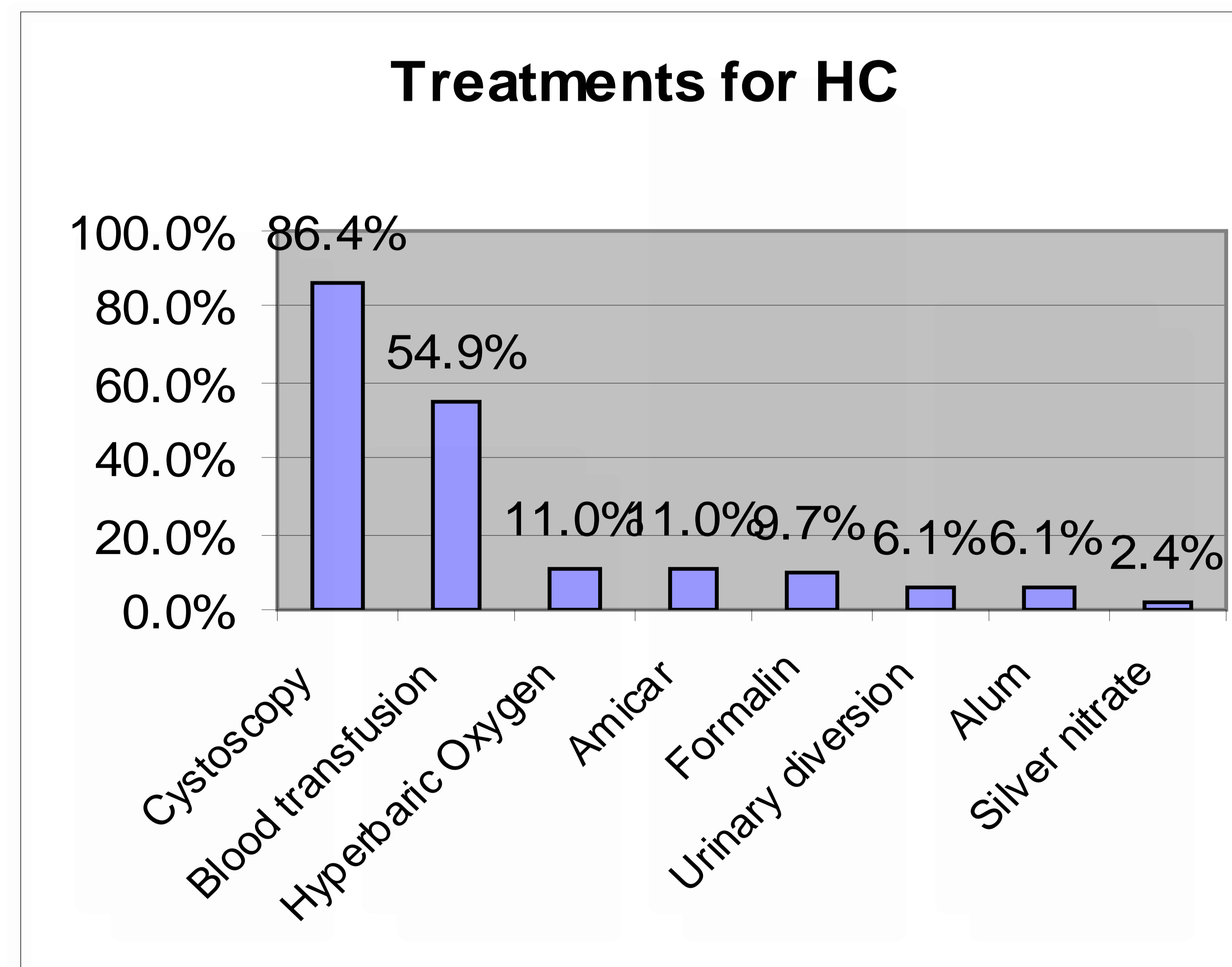
- To report the incidence, treatment, and associated morbidity of HC after radiation therapy for prostate and bladder cancer at our institution.

METHODS

- Retrospective chart review from January 2000 to September 2015.
- 788 patients underwent radiation therapy for prostate or bladder cancer.
- In patients who developed HC, we analyzed the incidence, radiation modality, morbidity, treatment, and complications.

RESULTS

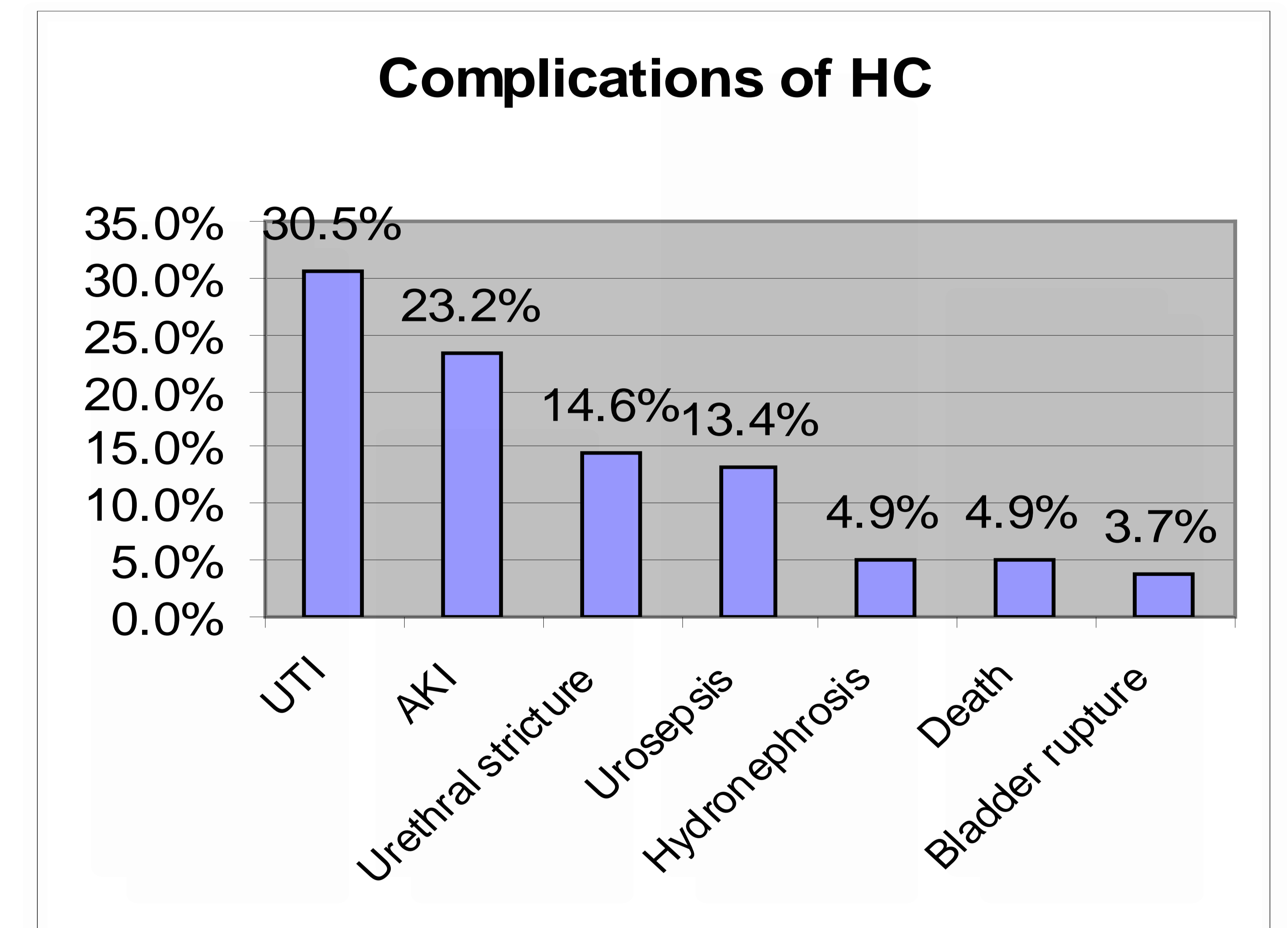
- Incidence of HC 10.4%.
- Patients developed HC at an average of 70.3 months (4-300) after radiation.
- Radiation treatment**
 - EBRT 52.4%
 - IMRT 13.4%
 - Salvage radiation 2.4%
 - Mixed neutron/photon EBRT 8.5% or IMRT 3.7%
 - EBRT with brachytherapy 7.3%
 - Adjuvant radiation 4.9%
 - Unknown type 7.3%



RESULTS CONTINUED

Morbidity:

- Average number of admissions 2.6 (1-9)
- Average LOS 7.3 days (1-42)
- Average of 4.6 units transfused (0-33)
- 86.4% of patients underwent cystoscopy for fulguration/clot evacuation.
- Required average of 2.6 cystoscopies (0-11).



CONCLUSIONS

- Based on our results, the incidence of HC after radiation therapy for prostate or bladder cancer is under-reported in the literature.
- HC is associated with high morbidity for patients
- Often requires multiple hospitalizations, blood transfusions, and trips to the OR.
- Complications range from infection to death, and urologists must educate their patients accordingly.

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