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Admission Rates, Healthcare Utilization, and Economic Burden of Radiation Cystitis (RC) in the United States

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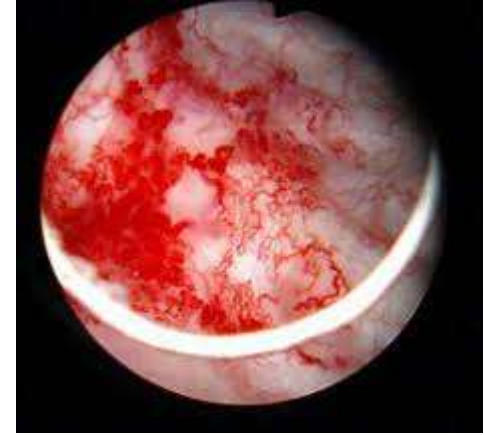


Admission rates, Healthcare utilization, and economic burden of radiation cystitis (RC) in the United States

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Introduction

- Radiation cystitis
 - Major cause of morbidity after radiotherapy for pelvic cancers.
 - might be a more frequent problem than previously thought,
 - Consisting of 1.4% of all elective admissions to a Urology;
 - Many patients never admitted to urology
 - Presentation beyond the follow up of clinical trials
 - actual prevalence not known.
 - No definitive cure
 - Repeated admission to inpatient care, often undergoing multiple urological procedures for management of hematuria.
 - Intractable cases may require morbid procedures like cystectomy!!
 - **Scanty funding for research**



Admission rates, Healthcare utilization, and economic burden of radiation cystitis (RC) in the United States

Methods

- Included: 21,157 records of adult patients with a diagnosis of RC within the NIS from 2003-2014.
- Excluded: Concurrent diagnosis of bladder cancer, CIS, or tuberculosis of bladder (n=1,422), leaving 19,613 records for analysis (population estimate 94,434 per NIS survey weights).



H·CUP
HEALTHCARE COST AND UTILIZATION PROJECT



Credit: https://www.hcup-us.ahrq.gov/db/nation/nis/reports/NIS_2000_Design_Report.jsp

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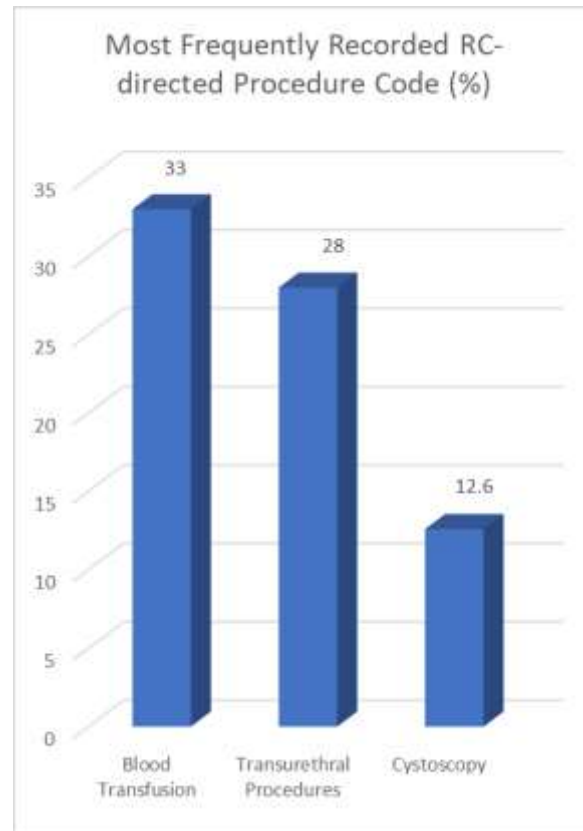
Methods

- Outcomes studied:
 - Receipt of any inpatient procedure during admission,
 - number of inpatient procedures received (0, 1, 2, >2),
 - length of stay,
 - disposition of patient at discharge,
 - total inflation-adjusted total cost of admission, and
 - high total cost (upper quartile of inflation-adjusted cost).
- Cost for each admission and cumulative annual cost of RC-associated admissions were calculated for the study period.

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Results

- Median age **75.7 years**.
- The inflation-adjusted **cost per admission was 9207 US dollars** (IQR 5275 -17,573)
- 90% of the admissions were in hospitals located in urban areas.
- **61.2% patients received at least one inpatient procedure.** 43% of admissions recorded more than one RC-directed procedure code.
- Median **length of stay 4.5 days**
- The cumulative cost of inpatient treatment of radiation cystitis was 63.5 million US dollars per year, amounting to a total of 952.2 million over the study period.
- Radical cystectomy was done in 1.3% of the admissions.



Conclusion

- Disease of the elderly
- RC associated admissions are costly. About 2/3rd of the patients require procedures, 43% requiring more than one procedure.
- Major economic burden to US healthcare.
- No definitive treatment available
- Funding implications.