



# Does Radiation Therapy Impact Outcomes of Individuals Undergoing Revision Artificial Urinary Sphincter Surgery?

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# Objective

- The effect of radiation on artificial urinary sphincter (AUS) outcomes remains controversial
- We aimed to evaluate AUS outcomes after revision surgery among patients, stratified by prior radiation therapy

# Methods

- Retrospective review of AUS revision surgeries
  - Study timeframe: 1983-2016
- Device survival endpoints were compared by radiation status via Kaplan-Meier method
- Proportional hazard regression and competing risk analysis were used to evaluate association between radiation and device outcomes

# Results

- 527 revision patients, including 173 (33%) w/ a hx of radiation
- Median follow-up 2.4 years (IQR 0.3-7.0)
- No significant difference in:
  - 5 yr overall device survival (50% vs 64%;  $p=0.08$ )
  - Infection/erosion, malfunction, or urethral atrophy rates
- These findings may inform counseling for patients considering AUS revision surgery

