DECISIONAL CONFLICT AMONG PATIENTS NEWLY DIAGNOSED WITH CLINICAL T1 RENAL MASSES

Amir Feinberg[1], Kathryn Hacker Gessner[1], Shannon Myers[1], Hillary Heiling[2], Allison M. Deal[2], Sara Wobker[4], Allison Lazard[1,5], Marc Bjurlin[1], Mathew Raynor[1], Angela Smith[1], Eric Wallen[1], David Johnson[1], William Kim[2,3], Hung-Jui Tan[1,2]

Departments of Urology[1], Oncology[3], and Pathology[4], Lineberger Comprehensive Cancer Center[2], Hussman School of Media and Journalism[5]
University of North Carolina, Chapel Hill, NC

Objective

To evaluate clinical, tumor, and decision-making factors that drive decisional conflict among patients with clinical T1 renal masses suspicious for kidney cancer.

Background

- Management of clinical T1 renal masses is a complex, preference sensitive decision for newly diagnosed patients.
- Current treatment options
  - Partial nephrectomy – 98% cure rate
  - Thermal ablation – 92-94% cure rate
  - Active surveillance for small renal masses (SRMs) ≤4 cm in size for patients with significant competing risks
- The Decisional Conflict Scale (DCS) measures personal perceptions of a) uncertainty b) modifiable factors and c) effective decision making
- In a previous study, 30% of patients with SRMs reported high levels of decisional conflict.

Methods

- From October 2018–June 2022, patients with new Clinical T1 Kidney Tumors were enrolled onto GRADE-SRM (Genomic Risk Assessment and Decisional Evaluation for Small Renal Masses)
- Baseline survey on decision making and communication
  - Self-efficacy, numeracy, maximizer-minimizer tendency
  - Information seeking behavior, patient-centered communication
- Decisional conflict served as the primary outcome as captured by the decisional conflict scale (DCS).
- Compared total DCS score (0-100) and low (<25) vs. high decisional conflict (25+)
  - By patient and tumor characteristics using bivariable analysis
- Fit multivariable regression models
  - health status, tumor burden, decision-making, and communication characteristics.

Results

- 229 of 265 (86.4%) enrollees completed a baseline DCS survey
- Descriptive Covariates
  - Mean age was 62.4 years (SD 11.2)
  - 61.4% were male
  - 31.3% were non-White
- 74.9% had an SRM less than 4cm in diameter
  - 10.7% had high complexity tumors
  - 5.9% had bilateral masses
  - 6.4% had multifocal masses
- Overall, the mean DCS score for the study population was 16.8 (SD 14.1) though 39.3% demonstrated higher levels of decisional conflict.
- Patients with high complexity (p=0.025), bilateral (p=0.043), or multifocal masses (p=0.027) had significantly higher DCS compared to counterparts.

Figure 1. Bivariable Analysis of DCS high vs Low at T0

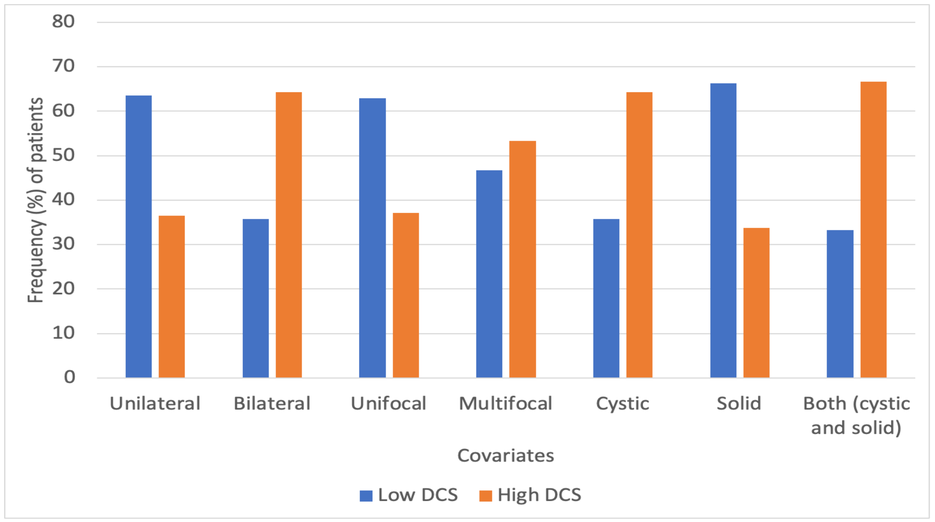

Table 1. Analysis Of GEE Parameter Estimates

Parameter	Estimate	Standard Error	Pr> |Z|
Self Efficacy	-0.2814	0.1376	0.0408
Numeracy	-0.0789	0.1089	0.4690
MaxMin	-0.0036	0.0089	0.6853

Results, continued

- DCS scores increased with lower self-efficacy (p=0.005) but did not differ based on maximizer-minimizer tendency or numeracy
- Patients with more uncertainty, less information-seeking behavior, and who reported less patient-centered communication reported greater decisional conflict (p<0.001).
- On multivariable analysis, nephrometry score, uncertainty, and patient-centered communication remained significantly associated with DCS score (p<0.05).

Conclusions

- Over a third of patients with newly diagnosed clinical T1 renal masses suspicious for kidney cancer experience significant decisional conflict.
- High scores appeared to be driven by tumor complexity (e.g., nephrometry score, bilaterality, multifocality)
  - perhaps relating to the potential risks of treatment.
- High decisional conflict relates to lower self-efficacy, less information-seeking behavior, and worse perceived communication with their provider
  - Highlights the importance of patient decision-making needs and subsequent patient-provider communication.
- Efforts to improve the decision-making experience for patients with clinical T1 renal masses will need to focus on the collaborative aspects of shared-decision making, including how patients process information and can work best with their provider to make decisions.

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