Dr. Giandomenico Roviello

Oncologia Medica
Ospedale San Donato
Arezzo
Abstracts


- Abstract Number: 430. Intermediate-term outcomes from the DISSRM registry: A prospective analysis of active surveillance in patients with small renal masses. Ridwan Alam, Hiten D. Patel, Mark F. Riffon, Bruce J. Trock, Akachimere Uzosike, Peter Chang, Andrew J. Wagner, James M. McKiernan, Mohamad Allaf, Phillip M. Pierorazio; The James Buchanan Brady Urological Institute, Department of Urology, Johns Hopkins University School of Medicine, Baltimore, MD; Beth Israel Deaconess Medical Center, Boston, MA; Dana-Farber Cancer Institute, Boston, MA; Columbia University Medical Center, New York, NY; Johns Hopkins University School of Medicine, Baltimore, MD. Poster Board Number: Poster Session C Board #B13
Management cT1 renal masses

Surgery

Observation

Local procedures for selected patients
- Radiofrequency
- Cryoablation
**Malattia localizzata**

(T1-T2)N0M0

↑ rischio chirurgico:
- Paziente monorene
- Insufficienza renale
- Paziente unfit

Chirurgia:
- Radicale
- Conservativa (T1a-T1b)

Biopsia

Terapia ablativa

Sorveglianza attiva
Cryoablation of cT1 Renal Masses in the “Healthy” Patient: Early Outcomes from Mayo Clinic

Harras Zaid MD, Tom Atwell MD, Grant Schmit MD, Stephen Boorjian MD, William Parker MD, John Cheville MD, Bradley Leibovich MD, R. Houston Thompson MD

Department of Urology and Radiology
Mayo Clinic
Rochester, MN
Methods

Single institutional review of our prospectively-maintained ablative database 2003-2015

Inclusion criteria

- ≤65 years
- solitary, non-metastatic renal masses <7cm (cT1)
- ASA score of 1 or 2
- pre-operative eGFR was >60
43 (6.1%) were deemed to be “healthy”.
- Median age 57 years (IQR 52–62)
- pre-ablation eGFR of \(75.6\) (IQR 69.0-86.3).

Prior renal surgery
- 7 (16.3%): partial nephrectomy
- 5 (11.6%) had a solitary kidney

Mass characteristics
- 40 (93.0%) cT1a
- 3 (7.0%) cT1b
- 27 masses (63.7%) were biopsy-proven renal cell carcinoma (RCC)

Complications
- 3 (7%) with a complication within 30 days
Follow-up

- Median radiological follow-up was 22 months (IQR 9-42)
  - 2 patients developed metastatic disease
  - 1 developed local recurrence

- No patients died from RCC during this time period
Conclusion

In this single institution cohort of “healthier” patients with cT1 solitary renal masses, cryoablation offered reasonable short term oncologic control.

Low morbidity (7%)
Strenghts

- Large series of «healthy» patients
- Procedure and technique well standardized
- Percutaneous approach
- Multidisciplinary
Weakness

- Nature of the study
- Short follow-up
- General anesthesia
- Lack of tumor histology
Abstracts


• Abstract Number: 430. Intermediate-term outcomes from the DISSRM registry: A prospective analysis of active surveillance in patients with small renal masses. Ridwan Alam, Hiten D. Patel, Mark F. Riffon, Bruce J. Trock, Akachimere Uzosike, Peter Chang, Andrew J. Wagner, James M. McKiernan, Mohamad Allaf, Phillip M. Pierorazio; The James Buchanan Brady Urological Institute, Department of Urology, Johns Hopkins University School of Medicine, Baltimore, MD; Beth Israel Deaconess Medical Center, Boston, MA; Dana-Farber Cancer Institute, Boston, MA; Columbia University Medical Center, New York, NY; Johns Hopkins University School of Medicine, Baltimore, MD. Poster Board Number: Poster Session C Board #B13
Potentially aggressive pathology by tumor size

- Rates of metastatic disease are:
  - ~2% for 4 cm tumors
  - <<1% for tumors <3 cm
    - Institutional surgical data
    - Population-based outcomes data
    - VHL literature

- Suggests tumors ≤4 cm may be good candidates for active surveillance

active surveillance

• Management option for patients with SRMs who desire to avoid surgery or defer immediate treatment
  • Prevent overtreatment of benign tumors or clinically insignificant cancers
  • Avoid associated risks of treatment (loss of nephrons, chronic kidney disease)
• Patients are followed-up with testing (blood, imaging, biopsy, etc.)
• Intervention recommended upon signs of progression
Intermediate-Term Outcomes from the DISSRM Registry: A Prospective Analysis of Active Surveillance in Patients with Small Renal Masses

Ridwan Alam, Hiten D. Patel, Michael A. Gorin, Mark F. Rifflon, James M. McKiernan, Andrew A. Wagner, Peter Chang, Mohamad E. Allaf, Phillip M. Pierorazio

James Buchanan Brady Urological Institute
Johns Hopkins University School of Medicine
Baltimore, Maryland
the DISSRM registry

“Delayed Intervention and Surveillance for Small Renal Masses”

- Opened on January 1, 2009
- Multi-institutional
  - Johns Hopkins (Baltimore, MD)
  - Columbia University (New York, NY)
  - Beth Israel Deaconess (Boston, MA)
- Open enrollment, prospective study
  - Inclusion criteria:
    - ≥18 years old
    - Small renal mass (clinical stage T1a, ≤ 4.0 cm)
patient management

- Patients choose management after counseling
  - Primary Intervention (surgery, ablation, etc.)
    - Standard post-surgical follow-up care
  - Active Surveillance
    - All patients offered biopsy at enrollment
    - Axial imaging (CT or MRI) at enrollment
    - Alternating ultrasound and axial imaging every 6-12 months
    - Intervention recommended upon evidence of progression
      - Growth Rate >0.5 cm/year
      - Tumor Diameter >4.0 cm
      - Metastatic Disease
      - Crossover to Delayed Intervention

- Patients may choose to withdraw or crossover at their own discretion.
DISSRM: vital statistics

- 615 patients
  - Primary Intervention: $n = 298$ (48.5%)
  - Active Surveillance: $n = 317$ (51.5%)
    - Delayed Intervention (Crossover): $n = 45$ (14.2%)
  - Median follow-up: 3.0 years [IQR 1.1 – 5.0]
    - 126 patients (23%) followed for $\geq 5$ years
DISSRM: vital statistics

- Surveillance patients:
  - Older: 70.8 years vs 61.8 years ($P < 0.001$)
  - Worse Health:
    - ECOG 2-4: 5.8% vs 2.4% ($P = 0.02$)
    - Charlson 0: 43.5% vs 60.1% ($P < 0.001$)
  - Smaller tumors:
    - Diameter: 1.8 cm vs 2.5 cm ($P < 0.001$)
    - Volume: 3.3 cm$^3$ vs 12.1 cm$^3$ ($P < 0.001$)
growth rates in active surveillance

Variability in growth rate is high within the first year of imaging and decreases with longer follow-up.
- Variation in measurement
- Mathematical artifact
Cancer-Specific Survival

Number at Risk
Primary Intervention 254 203 130 43
Active Surveillance 285 142 63 21

log-rank, $P = 0.3$
Conclusion

In the **intermediate-term**, active surveillance appears to be as safe as primary intervention for carefully selected patients with small renal masses.
**Strengths**

- Large series of active surveillance

**Weakness**

- No randomization
- Short follow-up
Conclusion

• Ca and AS should be offered only for a selected group of patients.

• Further phase III trials are awaited to better define the role of CA or AS in T1 Renal cancer patients fit for surgery.
THANK YOU!