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### AUA VIRTUAL EXPERIENCE



Institute for Urology and Reproductive Health SuperPulsed Thulium-fiber laser for lithotripsy: first clinical experience in percutaneous nephrolithotomy

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*Institute for Urology andReproductive Health* 

# **Objective, Materials and Methods**

Objective: to evaluate the efficacy and safety of SP TFL in PCNL

#### Patients

- Kidney stones up to 30 mm
- A total of 137 males and females

#### Methods

- SP TFL av.power 40 W, peak power 500 W
- Settings 0.1-4.0 J, 7-300 Hz and 6-40 W
- 4 surgeons



SuperPulsed Thulium-fiber laser

Likert scales for visibility and retropulsion

Stone-free rate at 3 mo with low-dose CT





## **Results and Conclusions**

• SP TFL - effective in low- and high-dense stones

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- Retropulsion only noted in 13.1 % of cases
- Low complication rate (Clavien II-IIIa 9%)
- No thermal damage or strictures
- Stone-free rate at 3 mo 85%

- SP TFL produces minimal retropulsion
- SP TFL is a safe and efficient tool for lithotripsy