

## Safety of Tubeless Double Access Percutaneous Nephrolithotomy Compared to Single Access Approach

Majed A. Mohammad, PhD\* Abdula Yousif Al-Timary, PhD\*\* Ali Malik Tiriyag, MSc\*\*\*

### ABSTRACT

**Rationale:** Comparison between single and double tubeless PCNL procedures outcomes was the justification of this article.

**Aim:** To contrast tubeless double access PCNL's follow-up issues with a single access method.

**Patients and Method:** A comparative evaluation research carried out at Dar Alshifa Private Hospital over the period of January 2017 to November 2020. In this study, 90 patients with renal stones were enrolled. Single access (Group A, number = 58) or double access (Group B, number = 32) totally tubeless PCNL procedures were performed. Blood transfusion frequency and hemoglobin (Hb) decline after the first 24 hours post-operatively were used to measure bleedings. Also, the rates of stone-free pee and urine leakage were evaluated.

**Results:** A total of 90 patients underwent tubeless PCNL, with a mean age of 45.1 13.5, and 40.9 17.2 respectively. Single access (Group A, number = 58) and double accesses (Group B, number = 32) were used. The ratios of men to women were (2.9:1) and (1.6:1), respectively. There are no appreciable statistical differences in this disparity. Hemoglobin levels postoperatively, bleeding from tract sites, leaking from the tract site between the first and third postoperative days, urinoma, and hematoma formation did not differ significantly statistically from one another. Also, there were no differences in the two groups' hospital stays or rates of stone-freeness.

**Conclusion:** Double access PCNL approach does not significantly differ from the Single access PCNL regarding the hemoglobin drop, hospital stay, infection rate, leakage rate, and stone clearance rate. Tubeless PCNL is considered an efficacious, safe procedure in the treatment of renal stone disease.

**Keywords:** PCNL, Double access, Single access, Basra

*Bahrain Med Bull 2023; 45 (2): 1407 - 1411*

---

\* Assistant Professor  
Dean of College of Nursing  
University of Basrah  
Iraq.

\*\* Department of Surgery  
College of Medicine  
University of Basrah  
Iraq

\*\*\* Fundamentals of Nursing Department  
College of Nursing  
University of Basrah  
Iraq.  
E-mail: ali.malik@uobasrah.edu.iq