

UAA Congress 2021 – Faculty Abstract

Upper pole access in PCNL

Rajeev Kumar, India

Abstract

One of the most important predictors of success during PCNL is the location of the access tract. A short, straight tract, through a calyceal fornix, that allows access to the largest bulk of the stone is likely to result in the highest clearance rates with lowest complications. Anatomically, in a prone patient, the upper pole of the kidney lies closest to the skin and the posterior tilt of the kidney means that the upper pole infundibulum follows the renal axis closely. Placing the PCNL tract through the upper pole thus allows the widest access with minimal intra-renal torqueing of the instrument. However, the upper pole also frequently lies above the level of the 12th rib and the access tract may breach the diaphragm and the pleura. This is associated with a higher risk of complications, particularly hydro/hemo thorax. Fortunately, most such complications are mild and require minimal additional intervention. Thus, where feasible, the upper pole should be preferred as the access route for PCNL.