Access to the kidney during percutaneous nephrolithotomy

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Percutaneous Nephrolithotomy (PCNL) is the first-line treatment modality for the management of kidney stones larger than 2 cm in diameter. The creation of a percutaneous renal access is the most important step in PCNL and the adequacy of the access directly influences the success and complication rates of this procedure. Several techniques have been used for guidance for entrance to the collecting system, including fluoroscopy, computed tomography (CT) and ultrasonography (US), however access under fluoroscopy is the most commonly used. The aim of this presentation is to emphasize the importance of the renal access, mainly the monoplanar technique, during PCNL. The access under fluoroscopy control can be performed either under biplanar or monoplanar guidance. Biplanar access is based on the cephalad-caudad and mediolateral movements of the needle; the depth of the needle is adjusted with using fluoroscopic imaging in 30 degree and vertical positions. Monoplanar access is based on the intensive movement of the kidney and the retraction of the targeted calyx under fluoroscopy on a vertical plane only. The monoplanar access technique is a safe method, it decreases puncture and radiation time, it minimizes the patient’s, the surgeon’s and stuff’s direct exposure time to radiation and it has similar success rates as the biplanar access technique.

Biography
Morshed Salah has completed his MD in 1992 from University Medical School of Pecs, Hungary and his Post-graduate studies on Urology in 1996 and PHD studies from University of Debrecen, Hungary in 2001. He has received his Master’s degree in Health Services Management from University of Debrecen, Hungary in 2007. He has worked as an Assistant Professor and Consultant Urologist in University of Debrecen, Hungary from 2002-2012. From 2012 to 2016, he has worked as a Consultant in Hamad Medical Corporation, Qatar and from 2016 to till date as a Senior Consultant. He is also an Assistant Professor of Clinical Urology in Weill Cornell of Medical College, Qatar from 2013 to till date.

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