better access and tension free closure of the abdominal approach might explain the higher failure in the vaginal repair.

*Received 7th March 2004. Accepted for publication in final form 20th July 2004.*

*From the Department of Urology (El-Imam), Department of Obstetrics and Gynecology (El-Hassan), University of Gezira, Was Medani and the Department of Obstetrics and Gynecology (Adam), New Halfa Teaching Hospital, Sudan. Address correspondence and reprint requests to Dr. Ishag Adam, PO Box 61, New Halfa, Sudan. Tel. + (249) 421822101. Fax. +(249) 421822070. E-mail: ishagadam@hotmail.com*

## *References*

1. Margolis T, Mercer LJ, Vesicovaginal fistula. ***Obstet Gynecol Surv*** 1994; 49: 840-847.
2. Angioli R, Penalver M, Muzii L, Mendez L, et al. Guidelines of how to manage vesicovaginal fistula. ***Crit Rev Oncol Hematol*** 2003; 48: 295-304.
3. Dupont MC, Raz S. Vaginal approach to vesicovaginal fistula repair. ***Urology*** 1996; 48: 7-9.
4. Raz S, Bregg KG, Nitti VW, Sussman E. Transvaginal repair of vesicovaginal fistula using a peritoneal flap. ***J Urol*** 1993; 150: 56-59.
5. Carr LK, Webster GD. Abdominal repair of vesicovaginal fistula. ***Urology*** 1996; 48: 10-11.

---

## Percutaneous nephrolithotripsy in supine position in Yemen

***Tawfik Ba'adani,*** *MD,* ***Mohammed Alwan,*** *MD,* ***Ibraheim Alnono,*** *MD,* ***Ismail Al-Meslemi,*** *MSc.*

Percutaneous nephrolithotripsy (PCNL) had been settled as one of different ways for treating renal stones and prone position is considered the standard position. They were afraid to considered colonic injury as a major morbidity. We think this is not related to the position in which the PCNL is performed as the colon is anteromedially located in relation to the kidney and to be injured should be in retrorenal position and this case occurred if the patient is slim and deficient of a retroperitoneal fat. Even in the supine position, the colon is displaced anteriorly away from the kidney. Also, some studies reported that retrorenal colon is 2% in the supine position and raised to 10% in the prone one.[1]

Percutaneous nephrolithotripsy in the supine position may also encourage regional anesthesia rather than general with easier access to intubation if needed. Serious bleeding is <1% which is similar to that occurs in other position as the site of the puncture is more laterally and you can follow the needle comes from the periphery and the calyx deformed and yielding in front of it giving you the sensation of puncturing of the calyx at or near the infundibula away from vessels.[2,3] Thirty-six patients with renal stones were subjected to PCNL in the supine position. Their ages were ranged between 26 and 70 years. They were comprised of 32 males and 4 females. The stones distribution was 21 on the left side and 15 in the right. The size of the stones ranged between 15 and 40 mm with an average of 25 mm. The degree of hydronephrosis was mild in 15 cases, moderate in 17 and severe in 4 cases. Localization of the pelvicaliceal system was through retrograde pyelography using ureteric cathether. The patient was pulled upward while a small pillow was put under the kidney to be punctured raising it up to 30 degrees horizontally (**Figure 1**). The table raised to the level of the surgeon chest to facilitate surgeon work in the sitting position.

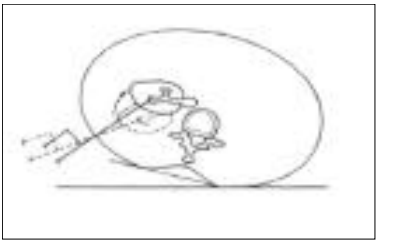

Figure 1 - Right kidney in supine position

The patient should be near the edge of the table to make movement of the nephroscope easier. The site of the puncture and tract creation should be in the posterior axillary line or slightly anterior. The direction of the definitive needle should be from the posterior axillary line directed anteriorly by 30 degrees horizontally aiming at puncturing the posterior calyx. Fasciotomy knife was used to cut through the tract until the dorsolumbar fascia was cut. The Amplatz dilator No. 30 over the central rod was used without the need for successive dilation using Alkans dilators and the sheath was passed over. Stone disintegration using the Swiss pneumatic lithotrite with spontaneous passage of small fragments which is facilitated by the supine position and big ones by 3 jaws forceps until the stone appears free and then nephrostomy tube No. 22 was left.

Succesful operations were achieved in 32 patients (89%), while failure in 4 patients. Puncture failure in one, losing the tract in 2, while incomplete stone removal in one. The operative time was 40-120 minutes. Blood transfusion was needed in 3

patients. A complication in the form of colonic injury on the left side was occurred in one case which close spontaneously within 10 days. Residual fragments <4 mm, occurred in 2 cases. Leakage occurred in 3 patients which needed double J stent, fever in one case and secondary hemorrhage occurred in one case which responded to conservative treatment. No second look was needed and hospital stay was ranged between 2 and 4 days with an average of 2.6 days. No mortality was recored.

Percutaneous nephrostomy was first described to relieve obstruction of an obstructed kidney by Goodwin and since then the procedure was performed with increase frequency to extract renal stones and proved to be safe and reliable. They placed the patients prone may be to avoid the colon. Some difficulties were faced in this position such as subject discomfort, circulatory and ventilatory difficulties and position changes. When the patient was prone the colon is pushed against the kidney and may get behind it while in the supine the colon remains away from the kidney from its anteromedial position.[3,4] From our study, we got only one colon injury out of 36 cases which occurred in the beginning (third case) and it might be because the tract was more anteriorly; thus, the site of the puncture should be on the posterior axillary line or slightly anterior and also there was no colon injury reported by few researches,[5,6] which needs more studies.

Success rate was approximately 89% in our study which is acceptable and we made our tract through the lower posterior calyx in all cases and we were more comfortable to tackle the calyx easily as we saw the needle comes from the periphery and how it deformed in front of it. Dilatation of the tract was easy especially as we use the fasciotomy knife over the guide wire so we jumped into the next step using Amplatz 30 over the central rods then to the sheath. Therefore, time was decreased in addition to that decreased by no change in the position in addition to the circulatory and ventilatory advantages. Others can be reached like easy intubation, shortage of time, and least radiation[7] as the hands is away from the field, good observation of the needle, slope of the sheath which leads to spontaneous passage of fragments which can be seen all over the surgeon gown. Also, small stones in the anterior calyx can be dropped to the posterior calyx in front of the nephroscope. Less bleeding also occurred as we tackle the infundibula which is away from the vessels and we only need blood transfusion in 3 patients postoperatively and we did not abandoned the maneuver because of bleeding. Supine position is safe for doing PCNL with good success rate with many advantages such as shortening of time, better ventilation, less radiation and other acceptable complications and non-colonic injury that was thought before.

*Received 1st May 2004. Accepted for publication in final form 16th October 2004.*

*From the Department of Urology, Sana'a University, Sana'a, Yemen. Address correspondence and reprint requests to Dr. Tawfik Ba'adani, Associate Professor, Department of Urology, Sana'a University, PO Box 18682, Sana'a, Yemen. E-mail: drtowfik@homail.com*

## *References*

1. Hopper KD, Sherman JL, Luethke JM, et al. The reterorenal colon in the Supine and prone patients. ***Radiology*** 1987; 162: 443-446.
2. Segura JW, Patterson DE, LeRoy AJ, et al. Percutaneous Lithotripsy. ***J Urol*** 1983; 130: 1051-1054.
3. Valdivia-Uria JG, Valer J, Villaroya S, et al. Why is Percutaneous Nephroscopy still performed with patient prone? ***J Endourol*** 1990; 4: 269-272.
4. Rodriguez-Netto N, Castera G, Fiuza JL. Colon Perforation following percutaneous nephrolithotomy. ***Urology*** 1988; 32: 223.
5. Shoma AM, Traky L, El-Kenawy MR, El-Kappany HA. Percutaneous Nephrolithotomy in the supine position: Technical aspects and functional Outcome compared with the prone position. ***J Urology*** 2002; 60: 388-392.
6. Valdivia-Uria JG, Arauda JM, Lopez JA, Tabernerllop J, Villaroya-Rodriguez S. Nuestra experiencia en al tratamiento de Ia litiasis renal Mediante nefroscopia percutanea. ***Cir Esp*** 1988; 43: 3.
7. Lowe F, Auster M, Beck T, Chang R, Marshall F. Monitoring radiation Exposure to medical personnel during percutaneous nephrolithotomy. ***Urology*** 1986; 28: 221.

---

# Psychosocial functioning and determinants of domestic violence among women. *An epidemiological study*

***Farouk M. Shakhatreh**, MD, MSc PhD,*
***Rowaida M. Maaitah**, BSN, PhD,*
***Montaha K. Gharaibeh**, BSN, PhD.*

Domestic violence is one of the most public health problems throughout the world. Between one quarter and one third of women from differentcountries reported having been physically abused within their families.[1] Although violence against women is widespread, efforts of its documentation and quantification are hindered by "cultural silence". In many countries, people became conditioned to accept violence against women as a legitimate means of settling conflicts. Of women who maintain silence, it is believed that their concerns for the honor of their husband and family is the primary reason for staying quiet. The isolation of women in violent situations deepens