

and maximum values of CIMT measurements were 0.5 mm (range, 0.2 mm to 1 mm) and 3.4 mm (range, 1.4 mm to 5.6 mm). They also found that age, high-sensitivity C-reactive protein, mean arterial blood pressure, and diabetes mellitus had a significant correlation with the mean CIMT, while only age and serum creatinine were significantly associated with the maximum CIMT. Of interest is their finding that a positive but nonsignificant correlation existed between the mean and maximum CIMT values.

In this study, Nassiri and coworkers found a significant correlation between the mean arterial blood pressure and the mean CIMT.<sup>9</sup> Intimal thickening is a process dependent on a variety of factors, related not only to atherosclerosis, but also to local changes due to high blood pressure.<sup>10</sup> Changes in blood pressure may cause facilitated transportation of particles into the arterial wall and cause some changes which result in thickening of the arterial wall. The authors, however, did not report any significant correlations between the mean arterial blood pressure and maximum CIMT.<sup>9</sup> This finding is a good reason for doing ambulatory blood pressure monitoring.

Although there was not any relation between lipid abnormalities and maximum and mean CIMT values, this could be due to abnormalities of lipoprotein composition rather than the level of low-density lipoprotein cholesterol. Nassiri and coworkers have carried out a promising study for evaluation of the effect of different risk factors on the mean and maximum CIMT values that could be regarded as a useful study for evaluating the atherosclerotic progression in hemodialysis patients.<sup>9</sup>

#### CONFLICT OF INTEREST

None declared.

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## Is Tubeless Percutaneous Nephrolithotomy a Safe Method in Patients With Kidney Failure?

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Since 1976, when Fernstorm and Johansson reported the first percutaneous nephrolithotomy

(PCNL),<sup>1</sup> this method gradually improved and now is the gold standard approach for kidney calculi.

Its goal is removal of kidney and upper ureteral calculi with low complication, shorter hospital stay, and minimal morbidity. In the standard technique described by the authors, placement of a ureteral catheter before getting access to the kidney and insertion of nephrostomy tube after calculus removal is recommended,<sup>1</sup> because it provides sufficient pyelocaliceal drainage, prevents urinary leakage from the kidney, provides an access pathway for a second look if needed, and stops bleeding due to tamponade of the access tract.<sup>2</sup> With advances in equipment and expertise of surgeons in past years, many modifications have been made in the techniques of procedure, such as using smaller tubes (*mini*-PCNL),<sup>3</sup> insertion of ureteral stent instead of nephrostomy tube after PCNL (tubeless nephrostomy),<sup>4</sup> and PCNL without any tube that is called totally tubeless PCNL.<sup>5</sup> Some surgeons use blind access to the pyelocaliceal system without using ultrasonographic guide or a C-arm.

Because of catheterization via the skin and perirenal tissues and puncture of the pyelocaliceal system, PCNL can cause severe postoperative pain and discomfort that needs a great amount of analgesics use and necessitates prolonged hospital stay. Therefore, efforts had been done to perform methods with lower morbidity and cost, and to reach these goals, some advocate tubeless PCNL.<sup>6</sup> In the recent years, access for percutaneous procedures are increasingly performed by urologists, rather than radiologists,<sup>7</sup> Using the tubeless technique, urologists insert a pig-tail catheter in antegrade fashion after getting access to target calculus and extraction of it, from the renal pelvis to the bladder, and then they terminate the procedure without using a nephrostomy tube. Although all steps of the procedure are the same as those of the standard PCNL, the absence of nephrostomy tube causes less skin, peri-renal, and renal parenchymal stimulation and significantly lessens postoperative pain. However, no significant differences exist between standard PCNL and tubeless PCNL regarding stone-free rates, operative time, blood transfusion requirement, and postoperative fever.<sup>8</sup>

Because of less complications and fewer postoperative hospitalization needed after tubeless PCNL, which was first described by Bellman and colleagues<sup>4</sup> in 1997, the great interest in performing this new technique among urologists became widespread and many studies had been done for

assessment of the results and complications of this method. Nonetheless, this method has some disadvantages as compared with the standard PCNL with nephrostomy tube, including symptoms due to ureteral stent, needing cystoscopy for stent removal, and impeding the possibility of a second look if needed.

Several researchers reported their experience with tubeless PCNL in patients with renal insufficiency and concluded that tubeless PCNL is safe in these patients in the absence of major bleeding or perforation in the collecting system or congenital anomalies. In this issue of the *Iranian Journal of Kidney Diseases*, Maghsoudi and colleagues report their experience with 60 patients with chronic kidney failure. They concluded that PCNL is a good option for these patients with kidney calculi and provided good results regarding stone-free rates, kidney function changes, and complications.<sup>9</sup> In another recent study, Akman and colleagues performed PCNL in 177 patients with chronic kidney disease and showed that renal function may improve or remain stable after the procedure.<sup>10</sup> In conclusion, tubeless PCNL seems to be a safe and effective procedure for patients with chronic kidney disease and kidney calculi and may be the first therapeutic choice in this group of patients.

#### CONFLICT OF INTEREST

None declared.

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## Unusual Site of Kaposi Sarcoma After Kidney Transplantation

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Kaposi sarcoma (KS) is the most common cancer after kidney transplantation in the Middle East countries.<sup>1</sup> The prevalence of KS in comparison with other tumors is also quite higher in Iranian recipients.<sup>1,2</sup> However, squamous cell carcinoma of the skin is the most common posttransplant malignancy in other reports.<sup>1,3,4</sup> Its incidence following kidney transplantation has steadily increased due to the long-term use of potent immunosuppressive drugs for prevention of allograft rejection.<sup>1,3,5</sup> The prevalence of posttransplant KS varies in different geographic areas, most cases reported from Mediterranean descent, suggesting the importance of ethnic or environmental factors in its development.<sup>1,3,6</sup> Several investigators have found that the higher levels of anti-human herpesvirus-8 antibodies in the Middle East region where there is a higher prevalence of KS.<sup>1</sup>

In the current issue of the *Iranian Journal of Kidney Diseases* a solitary laryngeal KS in a kidney transplant recipient is reported by Taheri and coworkers as an unusual involvement.<sup>7</sup> The patient who was a 40-year-old man presented with severe hoarseness after 21 months of his transplantation. It is important to note that 90% of kidney transplants with KS have skin lesions, mucosal lesions, or both. The oropharyngeal and conjunctival mucosa may be affected. Purely visceral involvement happens in 10% of recipients and their clinical manifestations are unusual.<sup>1</sup> Visceral disease predominantly affects the lymph nodes, gastrointestinal tract, and

lungs.<sup>8</sup> It is of interest that visceral involvement is less frequent in kidney transplants as compared to other solid organ transplants.<sup>8</sup>

Male recipients are about 1.5 to 3 times more likely to develop posttransplant KS than female recipients.<sup>7</sup> In addition, in all other forms of KS, the disease is much more common in men. Posttransplant KS tends to occur in younger patients; the mean age at the time of diagnosis is 43 years.<sup>1</sup> Kaposi sarcoma usually develops early (a mean interval of 12 to 20 months from transplantation).<sup>1,3,5</sup> The onset in the reported case has been documented 21 months after transplantation.<sup>7</sup> Although cytomegalovirus immunoglobulin M antibody was reported to be positive in this case,<sup>7</sup> there is no relationship between developing KS and cytomegalovirus serologic status before transplantation.<sup>3</sup>

Taheri and coworkers reported that surgical removal of the tumor combined with chemotherapy and conversion of cyclosporine and mycophenolate mofetil to sirolimus resulted in complete remission of the KS with no recurrence during a 3-year follow-up.<sup>7</sup> It is important to note that the mainstay of the treatment of KS after kidney transplantation is reduction or withdrawal of immunosuppressive drugs,<sup>1</sup> especially cyclosporine, because it may have direct oncogenic potential.<sup>9</sup> Interestingly, reduction or withdrawal of immunosuppressive agents in recipients with KS resulted in an acceptable remission with preserved kidney allograft function in the majority of patients.<sup>10</sup> Conversely, a discontinuation or reduction of such