Renal biopsy in supine position

Sir,

We read with interest the report by Gesualdo et al. [1] and would like to give some comments. Between 1996 and 2001, we conducted a prospective study [2], which included 45 consecutive (except in 3 cases) native renal biopsies in supine-oblique position. In short, the left flank of the patient is elevated ~45° by placing pillows under the shoulder and hip. The radiologist localizes an entry point in the lumbar region, and turns the transducer antero-superiorly over the flank. From here, he provides continuous real-time ultrasound guidance for the nephrologist who advances the gun towards the lower pole of the kidney, until the needle is visualized in a suitable angle over the renal capsule. Generally, two to three passes are necessary. Renal haematoma is assessed by ultrasound exam 5 min after the procedure and later if haematuria, lumbar/abdominal pain or a fall in haemoglobin exceeding 1 g/dl occurs. In 41 cases, we obtained two cylinders, for light and immunofluorescence microscopy; in four cases we got another one for electron microscopy. The mean number of glomeruli in the specimen under light microscopy was 11.97 ± 5.98; material satisfactory for pathologic diagnosis was achieved in 97.7% of the biopsies. There were two minor complications (asymptomatic perirenal haematoma and transient gross haematuria) and no major complications. These results compare favourably with other reports in prone position. Since 2001, we have performed, although in a non-prospective manner, 58 biopsies in that position. We agree with Gesualdo et al. [1] that supine position offers its main advantages in obese, patients with respiratory problems or elderly people, but we found an excellent tolerance and we have implemented it as our standard approach, only depending on the experience/preference of the radiologist. Reporting data on supine position (anterior, oblique) for renal biopsy will facilitate a wider application of this approach.

Conflict of interest statement. None declared.

Section of Nephrology and Service of Radiology, Hospital General de Elche, 03203 Elche (Alicante) Spain
E-mail: emma_@wanadoo.es

Ricardo Enriquez
Ana Esther Sirvent
Francisco Ardoy


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Reply

Sir,

We thank Dr Sirvent et al. for their comments on our recent paper [1]. As these authors summarize from their own experience [2], supine position offers its main advantages both in obese and non-obese patients as well as in patients with respiratory problems or elderly people. Since its tolerance is excellent, they suggest it as a standard approach and auspicate its wider application. We totally agree with Sirvent et al. Starting March 2007 [after a randomization period published in *NDT* (1)], this new technique is widely used in our institution. The patient may choose between the prone position (PP) and the supine antero-lateral position (SALP) independently being obese or non-obese. This point has also been stressed in our paper [1]. To date, more than 250 biopsies (comprising biopsies reported in our paper) have been performed in our division following this approach. In conclusion, we strongly believe in this new technique. Percutaneous renal biopsy can easily, safely and effectively be carried out in SALP in a standard nephrological setting, comprising local anaesthesia and US-guided kidney puncture. In comparison with the traditional PP, the SALP provides significantly higher patient compliance both in obese and non-obese patients, along with a similar diagnostic yield, and a slightly lower bleeding complications rate. Moreover, compared to the PP, SALP is particularly advantageous in patients with respiratory difficulty and/or obesity, thus enabling percutaneous US-guided renal biopsy to be carried out on patients who would otherwise have been submitted to more complex and invasive procedures.

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University of Foggia, Azienda Ospedaliero-Universitaria “OO.RR.”, Viale Pinto, 1, 71100 Foggia, Italy
E-mail: l.gesualdo@unifg.it