Proteinuria detected in men following sexual intercourse might be misleading

Sexual intercourse can cause proteinuria in men for up to 12 h, according to a small prospective study at the Israel Naval Medical Institute. When dipstick urine tests are positive for protein, further investigations must be undertaken. To avoid resource wasting, the researchers recommend that men refrain from sexual intercourse for at least 12 h before dipstick urine testing.

Men ($n = 22$) and women ($n = 11$) tested their own urine for protein before and after sexual intercourse using dipstick tests. All subjects were physicians or had partners who were physicians.

Although none of the subjects was proteinuric before sexual intercourse, proteinuria was detected immediately after intercourse in six men (27%, 95% CI 10–50%; $P = 0.008$), at a level of 0–0.3 g/l in two of the men and 0.3–1.0 g/l in the other four. Urine protein levels in all of these men normalized within 12 h. None of the women had excess protein in her urine after intercourse.

Following sexual intercourse, semen (which contains 6.3 g/l of albumin) might be excreted in the urine. Factors such as intense physical activity, fever and dehydration can also cause proteinuria and—together with sexual intercourse—should be avoided before dipstick urine testing whenever practicable.

Rachael Williams

Original article Domachevsky L *et al.* (2006) Proteinuria on dipstick urine analysis after sexual intercourse. *BJU Int* **97:** 146–148

Intermittent saline flushes during hemodialysis do not reduce risk of coagulation

Heparin-free hemodialysis with intermittent saline flushes (ISF) has been reported to be a safe and effective method for maintenance hemodialysis in patients with increased bleeding risk; however, studies supporting these claims have failed to include appropriate controls using heparin-free dialysis without ISF.

Sagedal and colleagues assessed six dialysis sessions performed with or without ISF (100 ml every 30 min) in each of eight stable patients on chronic hemodialysis. Dalteparin was given as one bolus dose (50% of conventional dose) at the start of each session. Potential clotting in the bubble trap was evaluated and graded on a four-point scale every hour, and the dialyzer was visually inspected at the end of each session. Coagulation and platelet activation factors were measured during hemodialysis.

Dialysis was stopped because of a coagulated system in four patients; all coagulations occurred during hemodialysis with ISF. Multiple linear regression analyses showed that ISF (adjusted for dalteparin dose/kg) significantly increased mean clot in the bubble trap compared with no ISF ($P = 0.0001$). The coagulation marker prothrombin fragment 1+2 was significantly increased when ISF was included in hemodialysis ($P = 0.001$).

These results indicate that, rather than alleviating coagulation, ISF promotes clot formation in stable patients receiving reduced doses of dalteparin. Further studies are required to determine whether these results also apply to unstable patients with increased bleeding risk not receiving any anticoagulation therapy.

Carol Lovegrove

Original article Sagedal S *et al.* (2006) Intermittent saline flushes during haemodialysis do not alleviate coagulation and clot formation in stable patients receiving reduced doses of dalteparin. *Nephrol Dial Transplant* **21:** 444–449

Iodinated contrast agents do not accelerate residual renal function decline in PD patients

Preservation of residual renal function has been shown to be important for peritoneal dialysis (PD) to remain effective over the long term. Administration of contrast medium to PD patients has been associated with adverse effects, including increased serum creatinine levels and increased risk of acute and chronic end-stage renal failure. Several factors, including old age, dehydration and diabetes, have been reported to put patients at further increased risk. Moranne *et al.* report that, with adequate hydration, stable PD patients do not exhibit accelerated decline following iodinated contrast medium administration (ICMA).

In a prospective, single-center study, the authors compared the results from 36 stable PD patients who received ICMA (iodixanol or iohexol, given at the recommended minimum volume of <200 ml to avoid toxicity) and 36