

- Medical awareness

A PRIMER ON URINARY STONES

What are urinary stones made up of? What can I and others do to prevent forming these stones?
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MEDICAL NOTES
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Urinary stones are chemical sediments in urine that have condensed and solidified. Actually, urine contains compounds that prevent or inhibit the formation of stones, but in some people these are lacking or not working, so when urine gets concentrated, dissolved minerals and salts crystallize, stick together, and form stones. For still unknown reasons, urinary stones are four times more common in men than in women.

Types of urinary stones

Most, around 85 percent, of urinary stones are made up of calcium, the rest consist of struvite, uric acid, and cystine.

Calcium stones are usually in the form of calcium oxalate, but they also occur in the form of calcium phosphate. Consumption of food high in oxalate increases one's risk for this

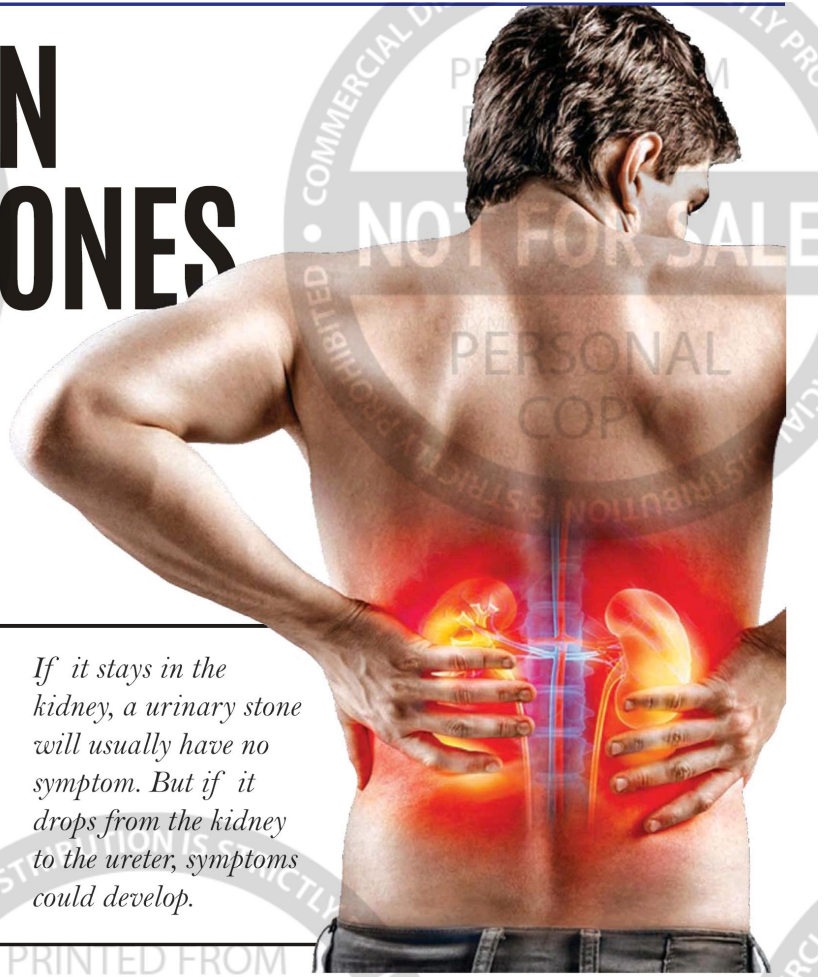
type of stone. Calcium phosphate stones, on the other hand, are more common in those with metabolic conditions such as renal tubular acidosis.

Struvite stones form in response to an infection, such as a urinary tract infection, while uric acid stones occur in people whose diet is high in purine and in those who have gout. Cystine stones, meanwhile, occur in people with a hereditary disorder that causes the kidneys to excrete an excess of certain amino acids.

Clinical course and treatment of urinary tract stones

Stones in the urinary tract invariably arise in the kidneys. If it stays in the kidney, a urinary stone will usually have no symptom. But if it drops from the kidney to the ureter, the tiny tube that conveys urine from the kidney to the urinary bladder, symptoms could develop.

The most common symptom of a ureteral stone is excruciating colicky pain that occurs suddenly. The



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