ABSTRACT
We report a case of a 65 – year – old woman who presented with pain in the left flank. Investigations revealed gross hydronephrosis with tight stricture in the mid ureter. She had undergone hysterectomy two years back. Provisional diagnosis of inadvertent ligation of the ureter during hysterectomy was made and excision of the stricture with uretero-ureterostomy was done. Histopathological examination of the segment revealed metastasis of carcinoma of breast and immunohistochemistry showed the cells to be positive for cytokeratin and estrogen and progesterone receptors. The lady had undergone modified radical mastectomy for carcinoma breast 12 years back. Final diagnosis was metastatic involvement of left ureter from carcinoma breast.

KEY WORDS: Ureter, Metastasis

INTRODUCTION
Metastasis from carcinoma of breast may involve any organ of the body. Ureteric obstruction presenting as hydronephrosis and hydroureter is a rare manifestation of metastatic breast cancer. Obstruction may be due to retroperitoneal fibrosis, retroperitoneal metastases or ureteric metastases. We report a case of a patient who was operated with provisional diagnosis of inadvertent ligation of the ureter during hysterectomy 2 years back only to find metastasis from breast carcinoma causing a tight stricture.

CASE REPORT
A 65-year-old woman presented with left flank pain for six months. She had a history of recurrent urinary tract infection over 2 years, for which she was treated with antibiotics according to culture and sensitivity pattern. She had undergone modified radical mastectomy of left breast for carcinoma breast 12 years back and hysterectomy for huge fibroid 2 years back. Preliminary investigations showed normal renal function with sterile pyuria. Ultrasonography and intravenous urography revealed hydroureteronephrosis on left side with a tight stricture approximately 2 centimetres long in mid ureter. Polymerase chain reaction of urine for tubercular bacilli was negative. Provisional diagnosis of inadvertent ligation of the ureter during hysterectomy was made and exploration of the ureter with excision of the strictured segment with ureteroureterostomy was done.

Histopathological analysis of the segment removed showed infiltration of the entire wall with atypical cells arranged in Indian file pattern, with nuclei showing polymorphism, hyperchromatism, and mitoses. On immunohistochemistry, the tumor cells were found to be positive for cytokeratin, estrogen and progesterone receptors. Histopathology and immunohistochemistry findings suggested a metastasis from breast cancer.

Mammography of the right breast showed no lesions suggestive of breast cancer. Dissemination of the disease to the most common sites of metastasis, such as the bone, lung, and liver, also could not be demonstrated. The patient is being closely followed up along with hormonal and chemotherapy.

DISCUSSION
Although most patients will have extensive metastasis to other organs at the time ureteral involvement is discovered, ureteral obstruction may be the presenting symptom or the first indication of metastasis as
found in the case reported. Hydronephrosis and ureteric obstruction secondary to breast cancer is an unusual presentation, often presenting many years after the primary tumour is clinically detected. Most cases of ureteral obstruction by a metastasis from breast carcinoma are detected at autopsy, and in those that have been recognized antemortem, there has generally been a long time lag between the diagnosis of breast cancer and the occurrence of retroperitoneal metastases. Thus insidious onset of urinary obstruction should alert clinicians to consider retroperitoneal metastases as a possible cause of vague urinary symptoms and unexplained back or flank pain in patients with a long history of breast cancer. The patient illustrated by us had undergone modified radical mastectomy for carcinoma breast 12 years back and for the last 2 years she had been suffering from repeated urinary tract infections and unexplained flank pain for 6 months. However there have also been illustrations where occult breast carcinoma have metastasized to the ureter, causing clinical symptoms before the primary process was detected.

Stow first reported metastasis of breast carcinoma to the ureter more than a century ago. Ureteral metastasis is usually symptomless. Back pain occurs in approximately half of the patients and a third will have hematuria. Other presentations may be in form of urinary frequency, polyuria, oliguria or uremia. The diagnosis is made by excretory, antegrade or retrograde contrast urography. The radiographic picture is isolated narrowing of a segment of the ureter, with proximal dilatation. The narrowing may be smooth or asymmetric and without displacement of the ureter. There may be diffuse involvement or only hydroureret without focal narrowing. Bilateral involvement occurs in 47 to 100 % of cases. Findings of cytologic studies of urine are infrequently positive because mucosal involvement is not common.

Ureteral catheterisation is recommended in isolated stricture due to metastasis. Nephrostomy and ureterostomy is indicated if the catheterisation is not possible. Nephrectomy is rarely required. Radiation therapy has been recommended for management, but urinary diversion provides much more relief. By the time there is metastasis to the ureter, most patients will have metastatic lesions elsewhere and systemic therapy is generally required. Systemic therapy is identical to that for metastatic breast cancer. In patients in whom estrogen receptors are present, or in those who have had a previous response to hormonal therapy, additive or ablative hormonal therapy is the treatment of choice. For patients in whom the presence of estrogen receptors in the malignant cells is not present, or where previous hormonal therapy has failed, systemic chemotherapy is the recommendation.

REFERENCES