

## Krukenberg Tumor: CT and PET-CT Findings

### *Krukenberg Tümörü: BT ve PET-BT Bulguları*

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### Krukenberg Tumor

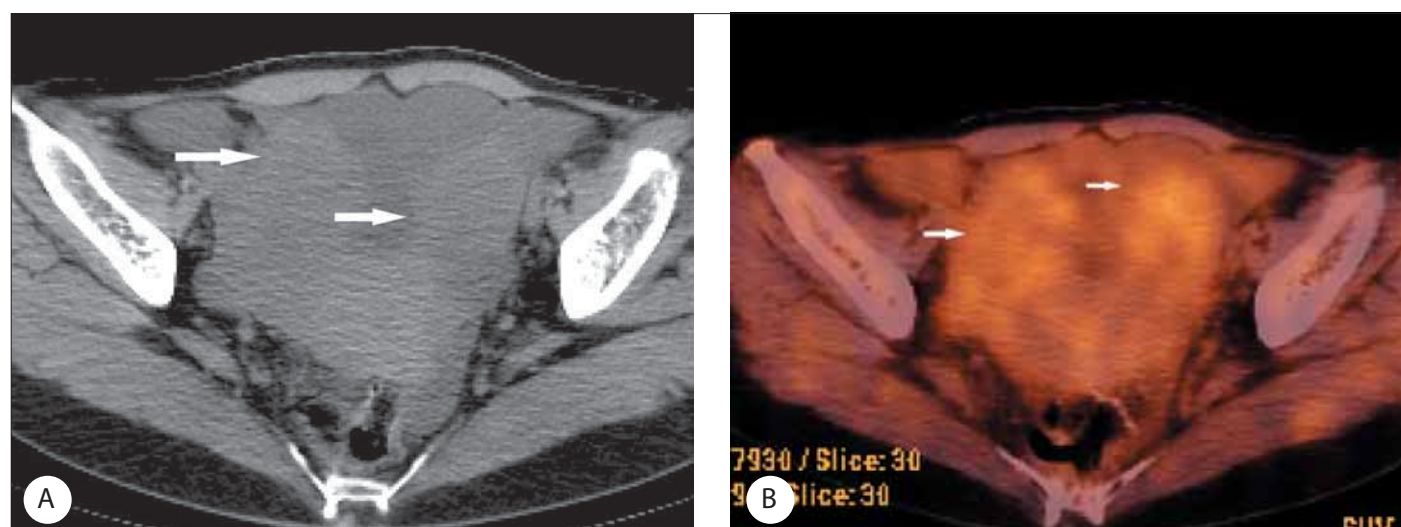
A 41-year-old female patient presented to our nuclear medicine department for initial staging of her known gastric cancer. A couple weeks earlier, the patient was diagnosed with a gastric cancer by endoscopic biopsy. She had complained of recent increasing abdominal and pelvic pain and was experiencing bloating, especially after meals. Physical examination showed nothing with the exception of suspicious rebound tenderness. A positron emission tomography-computed tomography (PET-CT) scan was performed. On CT images of the pelvis, there were two oval-shaped masses (Fig 1a, arrows) which expressed metabolic activity when viewed on the hybrid PET-CT images (Fig 1b, arrows). The SUV (standardized uptake value) were measured at 0.40 and 0.58 on the right and left, respectively.

Krukenberg tumors are metastatic signet-ring cell adenocarcinomas of the ovary. Krukenberg tumors are uncommon and account for 1% to 2% of all ovarian tumors [1]. The tumor was named by Freidrich Ernst Krukenberg, a German pathologist who, in 1896, first described the new ovarian tumor as: fibrosarcoma ovarii mucocellulare carcinomatodes. Krukenberg tumors are most commonly seen

in middle-aged and elderly females around, or following, menopause [2]. Although the symptoms, such as abdominal or pelvic pain, bloating or vaginal bleeding, are non-specific, they may suggest metastatic lesions in a patient with known gastric cancer. However, unlike in the present case, patients with Krukenberg tumors usually are not aware of their gastric cancer. Frequently, the tumors are confined to the gastric mucosa or submucosa at the time of diagnosis. It should be remembered that gastric mucosa and submucosa have a rich lymphatic plexus, and their invasion usually accounts for the spread of early gastric cancers. Thus, the development of Krukenberg tumors in cases of early gastric cancers can be explained on the basis of lymphatic spread.

### References

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