

# Giant Urinary Bladder Visualised on Tc-99m MDP Whole Body Bone Scan

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**Abstract:** We herein report an unusual appearance of an extensively enlarged urinary bladder on Tc-99m Methylenediphosphanate (MDP) whole body bone scan of a 67 years old prostate cancer patient with abdominal distension. Due to micturition problem, we inserted urinary catheter and drained 11.5 liters of residual urine. Abdominal distention regressed significantly. On postdrainage images, bladder activity was completely cleaned.

**Keywords:** Tc 99m medronate, incidental findings, urinary bladder diseases.

We present an unusual appearance of an extensively enlarged urinary bladder on Tc-99m MDP whole body bone scan of a prostate cancer patient who was 67 years old. He was asymptomatic except for

abdominal distension. We found no typical evidence of bone metastasis on whole body scans except for a suspected focal lesion on the right sacroiliac region but detected dense pathological activity retention belonging to a giant urinary bladder filling the whole pelvis and upper margin reaching to the level of kidneys. Pathological renal stasis was also detected on both sides (Figure 1). The patient was unable to void effectively. Therefore we inserted urinary catheter and drained 11.5 liters of residual urine. Abdominal distention regressed significantly. On postdrainage whole body images, bladder activity was completely cleaned (Figure 2). Activity retention reported on the right sacroiliac region was confirmed to be due to degenerative changes by MRI.



**Figure 1:** Whole body images of Tc-99m MDP bone scan. A suspected focal lesion on the right sacroiliac region is seen. Dense pathological activity retention belonging to a giant urinary bladder filling the whole pelvis and upper margin reaching to the level of kidneys. Pathological renal stasis was detected on both sides.



**Figure 2:** On postdrainage static images, no bladder activity was detected.

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On Tc-99m MDP whole body scan, incidental findings of urinary system has been reported [1, 2]. Normal functional bladder capacity is 300-400mL [3]. In our case, postvoiding catheterisation revealed 11,5 liters of postvoid residual volume. It was also interesting that the patient had no significant urinary symptoms but had abdominal distention only and the urinary pathology was first incidentally diagnosed by Tc-99m MDP whole body bone scan.

#### CONFLICT OF INTEREST

The authors declare that they have no conflict of interests.

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