

## Urgent Transurethral Resection of a Massive Bladder Clot in a Hemodynamically Unstable Patient

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### Abstract

### Case Report

This case report describes a 58-year-old male with a history of chronic smoking who presented with severe hematuria and hemodynamic instability. Initial assessment revealed a massive bladder clot and critically low hemoglobin. Despite initial interventions, the patient suffered cardiac arrest requiring prolonged resuscitation. Emergency cystoscopy was performed, removing a 320-gram clot and resecting a 2 cm bladder tumor. Despite successful surgical intervention and post-operative intensive care, the patient succumbed to multi-organ failure six days later. This case highlights the potential severity of hematuria and the importance of prompt diagnosis and treatment of underlying causes. It also demonstrates the challenges in managing complex cases involving massive hemorrhage, hemodynamic instability, and the sequelae of prolonged cardiac arrest.

**Keywords:** Hematuria; transurethral resection; bladder tumor; hemodynamic instability.

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## INTERVENTION

With the patient stabilized, he was urgently transferred to the operating room for cystoscopy. Cystoscopy revealed a massive bladder clot occupying the entire bladder cavity. The clot was carefully resected using bipolar transurethral resection. Upon further cystoscopic examination, a 2 cm tumor was identified on the right lateral wall of the bladder. The tumor was completely resected during the same procedure.

The total intervention time, including cystoscopy, clot resection, and tumor resection, was four hours and fifteen minutes. The weight of the resected clot was a staggering 320 grams.

## CASE PRESENTATION

A 58-year-old male with a past medical history of chronic smoking (35 pack-years) presented to the emergency department with worsening hematuria that had been present for several months. He also reported progressive weakness over the past week. Upon arrival, he was found to be hypotensive and tachycardic with a

blood pressure of 90/60 mmHg and a heart rate of 120 beats per minute. His hemoglobin was critically low at 2 g/dL. Physical examination revealed a soft, non-distended abdomen with a palpable suprapubic mass. A bedside ultrasound demonstrated a large, echogenic mass filling the entire bladder.

Despite urinary catheterization by a double-current catheter to attempt bladder irrigation and clot evacuation, the hematuria persisted, and the patient's condition deteriorated rapidly. He suffered a cardiac arrest, requiring immediate cardiopulmonary resuscitation (CPR) for approximately 13 minutes. Resuscitation efforts were successful, and the patient regained a pulse.

## POST-OPERATIVE COURSE:

The patient's hemoglobin was transfused with packed red blood cells, and his hemodynamic status stabilized. He was admitted to the intensive care unit (ICU) for further monitoring and management. Despite aggressive medical interventions, the patient's condition continued to deteriorate, and he succumbed to his illness six days after the cystoscopic procedures.



**Resected fragments of the massive bladder clot**

## DISCUSSION

This case report presents the complex management of a patient with a life-threatening combination of a bladder tumor responsible of hematuria and a massive bladder clot, hemodynamic instability, and prolonged cardiac arrest. Despite the successful initial resuscitation and clot evacuation, the patient's condition unfortunately deteriorated due to multi-organ failure, likely a consequence of the prolonged cardiac arrest.

This tragic case underscores the critical importance of never neglecting hematuria, even if it appears benign. Prompt diagnosis and treatment can significantly improve outcomes, even in those with underlying health conditions [1]. Unfortunately, in this instance, the severity of the initial presentation and the

subsequent cardiac arrest ultimately led to a fatal outcome.

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