Unusual urinary discoloration: a case report of blue urine in a patient with advanced prostate cancer

Shah NM^{1*}

¹Department of Medicine, Narendra Modi Medical College, LG Hospital, Maninagar, Ahmedabad, Gujarat, India



*Corresponding Author: Dr. Shah NM E mail ID: nandanmshah@gmail.com DOI:10.56018/20241207

ABSTRACT

Here, we present a case of blue urine in an 89 -year-old male with advanced prostate cancer and difficult to control hypertension as well as comorbid type II diabetes mellitus (T2DM), hyperlipidemia and chronic urinary retention. The patient was newly diagnosed with COVID-19 and returned to our hospital after 30 days of first admission, this time in respiratory failure.

Administration of Urogesic-Blue (methenamine, sodium phosphate, methylene blue and hyoscyamine) can cause this discolorization due to its content in part of methelyene blue as evidenced by the presence after analysis. These cases emphasize the importance of being aware that this is a potential harmless side effect to avoid unnecessary diagnostic procedures.

Prostate Cancer, especially when it comes with bone metastasis, increases complexity and difficulty in managing the patient. Comorbidity in the patient and attendant polypharmacy made treatment planning difficult, given that one had to be very cautious about drug-drug interactions so as not only manage mental health effectively but also treat actively existing medical conditions.

The situation escalated following the recent COVID-19 infection, which required hospitalization for final comprehensive monitoring and supportive care. High levels of proBNP suggest that the heart was under some stress, probably further increased by the presence of a virus making this case complex and certainly multidisciplinary.

This case informs the need for a complete medication history and patient counseling in cases of strange clinical presentations. Recognition of Urogesic-Blue as the agent in bluish urine permits health care providers to reassure patients and avoid unnecessary diagnostic work-ups. This report gives an insight into avoidable handling of intricate past medical history and multi-morbidity and adds knowledge on the bedside approach regarding blue urine.

Key words: Blue Urine, Prostate Cancer, Methylene Blue, Urogesic-Blue, COVID-19 Complications