

Volumetric overload shocks in the patho-etiology of the transurethral resection prostatectomy syndrome and acute dilution hyponatraemia.

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Abstract:

The transurethral prostatectomy syndrome (TURS) is defined as severe vascular hypotension reaction that complicates endoscopic surgery because of massive irrigating fluid absorption causing severe acute dilution hyponatraemia (HN) of <120 mmol/l. The vascular shock is usually mistaken for one of the recognized shocks and Volumetric Overload Shock type 1 (VOS1) is overlooked. To report VOS and its successful treatment of hyper-tonic sodium therapy that is lifesaving. To report that Starling's law is wrong the correct replacement is the hydrodynamic of the porous orifice (G) tube. We conducted the following studies: Prospective study on 100 consecutive TURP patients among whom 10 developed the TURP syndrome with acute dilution hyponatraemia (HN) and vascular shock. A case series of 23 TURP syndrome cases. A physics study on the hydrodynamic of the G tube. The TURP syndrome is defined as severe vascular hypotension reaction that complicates endoscopic surgery as a result of massive irrigating fluid absorption causing severe acute dilution hyponatraemia (HN) of <120 mmol/l. The vascular shock is usually mistaken for one of the recognized shocks and Volumetric Overload Shock type 1 (VOS1) is overlooked making Volumetric Overload Shock Type 2 (VOS2) unrecognizable. The most effective treatment for VOS1 and VOS2 is hypertonic sodium therapy (HST) of 5%NaCl or 8.4% Sodium Bicarbonate. The literature on TURS is reviewed and the underlying patho-etiology is discussed. Starling's law proved wrong and the correct replacement is the hydrodynamic of the G tube.

Conclusions:

Volumetric overload causes shock of two types, VOS1 and VOS2. VOS 1 is characterized with acute dilution HN and is known as the TURP syndrome. Mistaking VOS1 for a recognized shock and treating it with vascular expansion is lethal while HST is lifesaving. Starling's law which dictates the rules on fluid therapy proved wrong and the correct replacement is the hydrodynamic of the G tube.



Biography:

Dr Ghanem was educated in Egypt and qualified in 1968, Mansoura University, Egypt. He gained postgraduate experience in UK where he was promoted in posts up to the consultant level. He practiced as consultant Urologist in UK, Saudi Arabia and Egypt. During his career he reported over 60 articles. He discovered two new types of vascular shocks, proved that one physiological law is wrong and provided an alternative.



Speaker Publications:

- Ahmed Nasr Ghanem et al; Volume kinetic shocks in clinical practice: July 2020.
- Ahmed Nasr Ghanem et al: What is Misleading Physicians into Giving Too Much Fluid during Resuscitation of Shock and Surgery that Induces ARDS and/or AKI: April 2020.
- Ahmed Nasr Ghanem et al: Hepatic and Gastro-Intestinal Manifestations of Volumetric Overload Shocks (VOS) Causing ARDS: April 2020.
- Ahmed Nasr Ghanem et al: Short Communication Hyponatraemia: Nadirs and Paradoxes of the Missing Volumetric Overload Short Communication: March 2020.
- Ahmed Nasr Ghanem et al: Volumetric Overload Shocks Cause the Acute Respiratory Distress Syndrome: The Plenary Evidence on Patho-Aetiology and Therapy; July 2020.

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