

VISUAL DISTURBANCES DURING TRANSURETHRAL RESECTION OF THE PROSTATE

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CASE REPORT

AN ALERT 72-year-old patient underwent a transurethral resection for prostatic adenoma. He was healthy except for mild pulmonary emphysema. The preoperative haemoglobin was 17.7 gm per cent and the haematocrit 52.6. The serum electrolytes were Na 142; Cl 103 and K 5.6 mEq/l. An EKG showed left axis deviation with frequent premature contractions.

He was given morphine 8 mgm intramuscularly 90 minutes before a hyperbaric spinal block with nupercaine 7.5 mg which reached T9 sensory level. Diazepam 5 mg injected intravenously at the beginning of the operation left him awake but quiet. Toward the end of the operation the initial BP of 120/80 had fallen to 100/60 but it returned to 140/80 ten minutes after an intramuscular injection of ephedrine 50 mg. The operation was difficult and to avoid overhydration the patient received only 100 ml of 5 per cent glucose in distilled water intravenously.

Twenty minutes after the beginning of the resection the patient complained of dizziness, epigastric palpitations, and "silver flecks before the eyes." Ten minutes later his vision had become blurred. After another five minutes he saw only shadows, and again five minutes later only a dim light. He was rational though anxious about his blindness. He had no dyspnoea and his chest was clear. The blood pressure remained 120/80 throughout the episode.

The resection lasted 60 minutes. Blood loss was estimated at 900 ml. Glycine absorption was suspected. The prostatic chips weighed 23.5 gm. A traction catheter was inserted to control persistent prostatic bleeding. Seventy-five minutes after the beginning of the operation the patient entered the recovery room. He saw nothing except a faint glow. The serum electrolytes were then Na 110, Cl 84 and K 4.2 mEq/lit. An ophthalmologist found normal fundi and pupillary reflexes, but absent eyelid reflexes. The EKG was unchanged. Thirty minutes after his admission to the recovery room the patient passed 200 ml urine (sp.gr.1.001) and his eyesight improved. Urine volume was 2,000 ml during the next two hours and normal vision slowly returned. He recovered completely.

DISCUSSION

Significant quantities of irrigating solution may be absorbed into the circulation during transurethral resection of the prostate, leading to cerebral oedema "akin to water intoxication."¹

Neurologists describe mental changes including apprehension, restlessness, con-

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fusion and convulsions after water intoxication, but no visual disturbances.^{2,3} Urologists have occasionally reported blurred vision¹ or blindness^{4,5} associated with these mental changes, but have overlooked the mechanism causing them. Our patient's symptoms suggest cortical (occipital) blindness rather than oedema of a specific eye structure.⁶ The unchanged blood pressure during most of the episode, the normal retinal vessels and optic disc reported by the ophthalmologist and the return of vision after diuresis suggest cerebral oedema rather than ischaemia from hypotension, vasospasm, or increased intracranial pressure as the cause of blindness.

Ours seems the only reported case of visual disturbance without mental manifestations after transurethral prostatic resection. It leads us to speculate whether the visual symptoms are not an early sensitive sign of overhydration, preceding the mental changes and worth checking in conscious patients during prostatic resection.

SUMMARY

We present a case of temporary blindness without mental changes following over-hydration during transurethral resection of the prostate. The symptoms suggest oedema of the occipital cortex.

RÉSUMÉ

Nous présentons un cas de perte de vision temporaire, sans autres symptômes cérébraux, à la suite d'absorption excessive de liquides durant une résection prostatique transurétrale. Sa symptomatologie nous fait soupçonner un œdème du cortex occipital.

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