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Case Report

Laparoscopy-Assisted Ileal Conduit in Sacral Agenesis

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ABSTRACT

Sacral agenesis is a rare congenital anomaly. The neurologic deficits are usually static. However, there are reports of progressive neurologic deterioration. They have neurogenic bladder, which usually present late and managed according to the presenting urodynamic pattern. In this paper, we report the urologic management in a 4-and-half-year-old boy with sacral agenesis. He presented with constant dribbling owing to gross instability with a small-capacity bladder. He also had bilateral ureteric obstruction (i.e., stricture at the level of bilateral ureteric reimplantation, which was done at the age of 1 year for high-grade reflux). He was not compliant with intermittent self-catheterization. Various options were discussed with the parents, but they preferred an ileal conduit (which could take care of the leak and avoid complex reconstructive surgery), with an option of reconstruction later. Laparoscopic ileal conduit was performed, with the uretero ileal anastomosis and restoration of ileal continuity performed extracorporeally. Extracorporeal part of the procedure was done without any additional incision (by bringing the ureters and ileal segment outside through the 12-mm port and then pushing it back inside after the completion of the anastomosis). We present this case report for the less-morbid management of a complicated urologic problem.

INTRODUCTION

Sacral agenesis is a rare congenital anomaly. The spectrum varies, and significant neurologic deficits and multiple visceral anomalies can be associated. The actual incidence is less reported, as severe defects can result in stillbirths or neonatal deaths. Generally, the neurologic deficits are static, but there are recent reports of progressive neurologic deterioration. Bladder involvement is almost universal, and various patterns of urodynamic abnormalities have been described.

PATIENT AND METHOD

A 4-and-a-half-year-old boy with sacral agenesis (Fig. 1) presented with constant dribbling since birth. He was found to have an associated ventricular septal defect. He had undergone bilateral ureteric reimplantation when he was 1 year old for bilateral grade 4 vesico ureteric reflux elsewhere. Clinical evaluation at presentation revealed normal renal biochemical parameters and bilateral hydroureteronephrosis, with an obstructed ureter at the vesico ureteric junction. The hydronephrosis was more on the left side. An isotope renogram (Fig. 2) showed