Injuries of the Urinary Organs During Cesarean Section

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Injuries of the urinary organs which may arise during cesarean section are described. If unrecognized and not repaired during operation, injuries of the bladder or ureter may give rise to utero-vesical or utero-ureteral fistulas. Four cases are described of which 3 were utero-vesical fistulas, and one was a utero-ureteral fistula.

Injuries of the urinary organs during cesarean section are rare. They pertain mainly to the urinary bladder, whereas injuries of the ureter are exceptional. Injuries of the bladder and ureter, if identified at once and repaired, leave no permanent sequels. On the other hand, injuries overlooked during operation may lead to development of utero-vesical and utero-ureteral fistulas.

Case reports and results

In recent years we have treated 3 cases of utero-vesical fistula and one case of utero-ureteral fistula after cesarean section at the Urological Department of the Narutowicz Hospital in Kraków.

The three cases of utero-vesical fistula were similar. The age of patients was 34, 27 and 25 years. Two of them had previous cesarean sections. Several days after cesarean section discharge of urine through the vagina was noted. Urography was normal (Fig. 1). Cystoscopy showed the orifice of the fistula on the posterior bladder wall, beyond the trigone. Fistulography from the side of the bladder showed leakage of contrast medium into the lumen of the uterus (Fig. 2). Hysterography showed passage of contrast medium through the cervix and body of the uterus into the bladder (Fig. 3). When the bladder was filled with indigo carmine, colored fluid emerged from the unaltered orifice of the cervix. The anatomic situation in these cases is represented diagrammatically in Fig. 4. All three patients were operated upon from a transperitoneal and transvesical approach. Laparotomy was performed, an intestinal coil was deflected upward, and the body of the uterus forward, by partly blunt dissection. The canal of the fistula was transected. After precise extraperitonization of the site of the fistula,
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Fig. 1. Utero-vesical fistula

Fig. 2. Fistulography from the side of the bladder

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