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นิพนธ์ต้นฉบับ

Original Article

Four Hundred Ninety one Pediatric Inguinal Hernias : a 11 - years Review

การผ่าตัดไส้เลื่อนบริเวณขาหนีบ 491 ราย ประสบการณ์ในระยะเวลา 11 ปี

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ABSTRACT

Purpose : This study, by 1 pediatric surgeon aims to study about recurrent rate in pediatric inguinal herniotomy

Methods : From January 1997 to December 2006 infant and children with inguinal hernias were seen, operated by 1 pediatric surgeon A retrospective survey of their charts was carried out to evaluate recurrent rate of these patients

Result :The ages ranged from Newborn to 15 years and a male to female ratio was 6 : 1. There were 54% right, 42% left and 4% bilateral hernias. Incarceration occurred in 4% There were no postoperative deaths.

Conclusion : Pediatric inguinal herniotomy was safe and no recurrent rate .

บทคัดย่อ

จุดประสงค์ : - การศึกษานี้ทำโดยกุมารศัลยแพทย์ 1 คน
- เพื่อศึกษาเกี่ยวกับการเกิดไส้เลื่อนซ้ำที่บริเวณขาหนีบที่ผ่าตัด

วิธีการ : - จากเดือนมกราคม พ.ศ. 2540 ถึงเดือนธันวาคม 2550 ผู้ป่วยเด็กที่ผ่าตัดไส้เลื่อนที่ขาหนีบ ทำโดยกุมารศัลยแพทย์ 1 คน เป็นการศึกษาย้อนหลังเพื่อดูอัตราการเกิดไส้เลื่อนซ้ำที่บริเวณขาหนีบที่ผ่าตัด

ผล : - อายุตั้งแต่แรกเกิดถึง อายุ 15 ปี
- เด็กผู้ชาย : เด็กผู้หญิง 6 : 1

ไส้เลื่อนข้างขวา 54%, ข้างซ้าย 42%, สองข้าง 4%
ไส้เลื่อนอุดตัน 4%, ไม่มีผู้ป่วยเสียชีวิต
สรุป : การผ่าตัดไส้เลื่อนขาหนีบในเด็กปลอดภัย และไม่มีอัตราการเกิดซ้ำ

The inguinal hernia is the commonest defect that pediatric surgeons perform surgery on and is usually indirect imguiral. It is believed that these hernia rarely go away and therefore, virtually all should be operated. This study, by 1 pediatric surgeon, aims to study about recurrent rate in pediatric inguinal herniotomy.

Materials and methods

From January 1997 to December 2006, 491 infants and children with inguinal hernias were seen, examined and operated on by 1 pediatric surgeon.

The operations (all under general anesthesia) were the same technique throughout the series : Skin crease incision, dissect sac, ligate sac with nonabsorbable suture material, herniotomy, no repair. The closure was in layers, with a subcuticular suture of skin.

A retrospective review of their medical records was done. The variables evaluated were age, sex, side of hernia, incarceration, strangulation, recurrence and other associated complications.

Results

The age of the infants and children at the time of operation ranged from newborn to 15 years. There were 421 (60%) males and 70 (40%) females (ratio 6 : 1) with 54% right, 42% left and 4% bilateral inguinal hernias.

Incarceation occurred in 4% of patients. There were no strangulation.

There were no recurrence. There was 0.4% wound infection rate. No death related to the herniotomy occurred during this 10 - year series.

Discussion

Although larger series of pediatric inguinal hernia have been reported (meta-analysis, 15,000 Martinsburg et at[2], 1 service, 8,000 Gross[3]). This is the study by 1 pediatric surgeon. These 491 inguinal hernia operations in 10 years from January 1997 to December 2006. No patient with hernia was operated on because of history alone.

The incidence of a pediatric inguinal hernia reported throughout the literature has ranged between 0.8% and 4.4%. The male to female ratio in the literature ranges from 3 : 1 to 10 : 1.

Throughout the pediatric inguinal hernia literature, the term, patent processus vaginalis and hernia sac are used interchangeably.[9-11] Pain in herniotomy is important. If caudal analgesia was not used at the beginning of the operation for intraoperative and postoperative pain relief (the anesthesiologist's decision), a 0.5% bupivacaine 0.4 mg/kg (without epinephrine) block of the iliohypogastric and ilioinguinal nerves (beneath the external oblique and lateral to the internal ring) was carried

out before the external oblique fascia was closed.[12] The success rate of this local anesthetic block was about 65%. Acetaminophen was used for posto-peretive pain relief at home.[13] postoperative infection inguial herniotomy in this series. was 0.4%. There are at least 2 articles in the pediatric surgical literature[14-15] that address this common problem.

The patients were followed up until the patient returned to normal (1 month to 1 year). No attempt for a longer follow up was made, however, it was expected that if there was a new long-term problem the patient would return to the original surgeon.

Differential diagnosis of hernia is scrotal hydrocele. Scortal hydrocele (no evidence of asso-ciated hernia) will usually spontaneously disappear when the patient reaches 1 to 2 years of age.[16]

The premies have higher incidence of bilateral inguinal hernias than nonpremature patients do[17-23]

Much controversy about contralateral exploration pro and con continues to exist from many authors.[24-30]

The recurrence rate in this series (0%) fall between other report of 0% and 3.8%[16,30-31] Mean follow up is 5.5 years.

Athough this higher recurrence rate is not unusual, partrick et al[32] reported no recurrence in his series of 35 teenagers with indirect inguinal hernia repair using a polypropylene mesh plug inserted in the internal ring and a similar mesh on lay covering the posterior wall.

Conclusion

Pediatric inguinal herniotomy was safe and no recurrent rate.

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