

Letters to the Editor

Dear Editor,

Is Intestinal Hypermotility a Contraindication for Suprapubic Aspiration of the Bladder?

Suprapubic aspiration (SPA) of the bladder is the most reliable technique to identify bacteriuria. The technique is simple, relatively safe and causes minimum discomfort. SPA should be performed in infants with palpable bladder who have not voided recently. After cleaning the suprapubic area with an antiseptic solution, a 23 or 25 gauge needle syringe is inserted (vertically with stabbing movement in midline) perpendicular to the baby, approximately 2,5 inches above the pubic symphysis, aspirating gently while advancing the needle. The needle is angled 10 to 15 degrees cranially to avoid puncturing the trigone. In recent literature, ultrasound guidance improved the yield of urine compared to unguided aspiration.¹ Any growth of a urinary pathogen is significant. The most common complication of SPA is microscopic haematuria. Major complications, such as gross haematuria, haematoma and anterior abdominal wall abscess are rarely seen.² Intestinal perforation can occur if a loop of bowel overlies the bladder, but this complication rarely leads to peritonitis. It has not been reported to occur in the neonate previously.³ In this report, a newborn male infant who experienced intestinal perforation secondary to suprapubic aspiration is described. A male baby with a birth weight of 3600 grams and a gestational age of 40 weeks was born with caesarean section from a 26-year-old mother in her first pregnancy in our hospital. On the 7th day of life the infant was hospitalised with a diagnosis of indirect hyperbilirubinemia. Laboratory tests revealed the final diagnosis of breast milk jaundice and following 2 days of phototherapy the infant was discharged. Four days after discharge, on the 13th postnatal day he was admitted with poor sucking reflex and discomfort. In physical examination body weight was 3400 gr (6% weight loss), length was 48 cm, head circumference 36 cm, body temperature 36.5°C, hearth rate 140/min and respiratory rate was 48/min. bowel sounds were increased and the baby seemed restless. Other physical examination findings were quite normal. Laboratory tests were as follows; Hb: 15.7 g/dL,

haematocrit: 44.5%, white blood cell (WBC): 9300/mm³, platelets: 255000/mm³. Peripheral smear, liver function tests, renal function tests, electrolytes and C-reactive protein (CRP) were normal. SPA was performed with 23-gauge needle to rule out a urinary tract infection (UTI). During the aspiration, intestinal content was seen and procedure was stopped immediately. Abdominal X-ray showed sub-diaphragmatic free air (Figure 1) and the diagnosis of intestinal perforation was considered. Patient was hospitalised; intravenous fluids and broad-spectrum antibiotic therapy were started, oral feeding was stopped. Stool examination was performed because of hyperactive bowel sounds and watery diarrhea; however, microscopic examination was normal and the stool cultures were negative. On the second day of hospitalisation leucocyte count and CRP were raised to 24000/mm³ and 35 mg/dL,

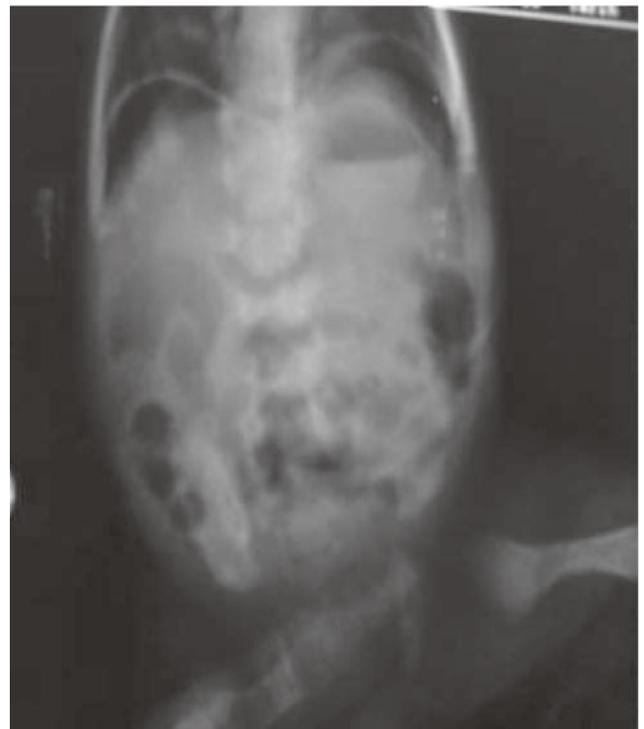


Figure 1 Sub-diaphragmatic free air of this baby.

respectively. Peripheral smear was reported as neutrophils: 76%, bant neutrophile: 10% and lymphocytes: 14%. Abdominal X-ray taken on the third day of treatment was normal. Free air that persisted for two days in direct radiography was lost in the third day of treatment. The general condition of the infant was good with normal bowel sounds and stool output. Oral feeding was started in the third day and the patient was fed completely oral on the fourth day. CRP and WBC count returned to normal values, blood culture was negative on the fourth day, and patient was discharged on the 7th day after completion of antibiotic treatment. Two weeks later patient's physical examination was normal; no infection nor abscess was seen on suprapubic region.

Suprapubic aspiration urine culture is believed to be the gold standard in diagnosing UTI because urine in bladder should be sterile. It is particularly useful in infants who have not attained bladder control. Though it is a safe procedure, intestinal perforation can occur if a loop of bowel overlies the bladder, but the small puncture rarely leads to peritonitis.³ Osteomyelitis after SPA was also reported in an adult patients but subdiafragmatic free air in a neonate was never reported before.⁴ Urinary bladder can reach subdiafragmatic region in a neonate so that there is a less probability of intestinal perforation comparing with older children and adults. Intestinal or other viscus perforation can be avoided if the procedure is not performed in children who have abdominal distension, organomegaly, volume depletion, or congenital anomalies of the gastrointestinal or genitourinary tract.^{3,5} Our case has a weight loss of 6%, but there was no anuria. Increased movement of bowel sections is thought to cause intestinal perforation, despite palpation of the bladder before aspiration. A careful assessment of bowel sounds must be done; before the procedure, if bowel sounds are increased we recommend to perform with ultrasound guidance. If an perforation is suspected, appropriate antibiotic therapy and discontinuation of oral intake is adequate in treatment. Patient should be monitored closely in terms of additional complications. Physical examinations, urine and blood tests

have to be done and the patient should be evaluated in regard to bleeding and sepsis; if in doubt ultrasonography has to be done for evaluating abscess or haematoma. Continuance of the bowel sounds after a possible perforation may be accepted as good prognostic criteria because our patients's bowel sounds did not disappear for the whole hospitalisation period.

In conclusion; if the patient is dehydrated or bowel sounds are increased, SPA should be performed with ultrasound guidance after a volume loading. Even intestinal perforation occurs, medical treatment should be started promptly and surgical operation should be kept in mind.

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Dear editor,

50th Anniversary of HKPS and the Evolution of the HKJ Paediatrics

We are intrigued to read the Editorial and noticed the Journal's position of being an official journal of both Hong Kong Paediatric Society (HKPS) and Hong Kong College of Paediatricians (HKCPaed). Over the years, since taken-over in 1996, the HKPS has practically relinquished the sole editorial duty to the HKCPaed in the hope that academics taking-over might create a better environment for publication. Over the years we see some change in the quality of the papers submitted and a scheme of review has been established, which is excellent. Unfortunately the role of HKPS is being obscured. Although the HKPS paid half of the upkeep of the Journal and bears a logo on the front cover, not a single page had ever been devoted to the paediatric

society's activity or policy ever since the changeover of editorial responsibility. In contrast, content of Chinese Journal of Paediatrics has been published on regular basis. Is this a deliberate policy of the Academy to thin out the Paediatric Society's political role? We urge the Hong Kong Journal of Paediatrics devote 2 pages for the society's sole use.

We believe that is unequal representation is partly due to HKPS's inertness: the recent problem with Milk powder formula advertisement being a prime example; a lot a noise being expressed but no concrete action and nowhere to show off.

SP LAU
 KP FUNG
 Paediatrician in Private Practice
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Reply

Dear Dr. Lau and Dr. Fung,

Thank you for your concern about the progress of our Journal and relationship between the Journals and our 2 founding Professional bodies.

As the official publication of both the Hong Kong College of Paediatricians (HKCPaed) and Hong Kong Paediatric Society (HKPS), it is the responsibility of our Journal to facilitate the dissemination of information from either the College or the Society. This has been ongoing and is usually presented in the format of announcement.

On the other hand, since Hong Kong Journal of Paediatrics (HKJP) is a professional and scientific publication, all articles submitted including management guidelines or expert opinions shall go through a peer-review process. No matter it is coming from HKCPaed or HKPS. The editorial board is functioning as an independent body to safeguard the professional and scientific merit of our journals.

Chief Editor
 On behalf of the Editorial Board
 HKJP