

10 mL, and 1mL/kg of this was dispensed to the participants of this trial. Though the safety of zinc supplementation in empty stomach has not been demonstrated earlier, we did not encounter any adverse reactions in any of the 614 neonates enrolled in the trial.

We agree to some of your points mentioning lacunae in our study and hope that future studies on this topic would incorporate these suggestions. Our findings are indeed contrary to the findings of the study by Bhatnagar, *et al.* [3] and as suggested, further studies are required to understand the exact role of zinc as an adjunct in the treatment of infants/neonates with sepsis.

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## Congenital Scaphoid Megalourethra

We read with interest the recent article on 'Congenital Fluctuant Penile Swelling' [1]. In this article authors have described a large anterior urethral diverticulum in a 15-month old male child presenting with a ventral penile mass, which was getting more prominent during micturition. Micturating cystourethrogram (MCU) and subsequent surgery proved it to be a large anterior urethral diverticulum.

Radiologically, image (MCU) provided by authors closely resembles that of congenital scaphoid megalourethra. Congenital megalourethra is a known but rare congenital malformation of the penile urethra [2-5]. It is defined as diffuse dilatation of the anterior urethra which may be due to absence of development or deficiency of erectile tissue of penis [3-5]. This particular congenital anomaly is known to affect the anterior part of urethra and usually causes abnormal shape and size of the penile shaft, especially during voiding [3]. Megalourethra, traditionally has been divided into scaphoid and fusiform sub-types. The scaphoid form of megalourethra (more common) is due to poor development of the corpus spongiosum in the anterior urethra whereas the fusiform type is believed to be due to maldevelopment of both corpus spongiosa and corpus cavernosa [3-5].

Megalourethra is known to be associated with other abnormalities of the urinary tract, and these include

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hydronephrosis, renal dysplasia, vesicoureteric reflux, prune-belly syndrome, urethral duplication, undescended testes and posterior urethral valves [3-5].

Although some authors earlier believed that congenital anterior urethral diverticula and megalourethra are in the same spectrum of a single malformation [3], however, Appel, *et al.* [6] differ from this and believe that congenital urethral diverticula are different from megalourethra, as it is associated with narrow orifices as well, thereby causing obstruction by luminal compression by filling, whereas megalourethra does not have a true distal anatomic obstruction.

The other possible differential diagnoses of megalourethra to be ruled out include congenital urethral diverticulum, anterior urethral valve, Cowper's syringocele and congenital urethral stricture. In most of these cases, micturating cystourethrogram (MCU) would clinch the diagnosis.

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## N-Acetyl Cysteine in Non-Acetaminophen Pediatric Acute Liver Failure: Recent evidence !

We read with interest the current consensus statement on management of acute liver failure in infants and children [1]. Pediatric acute liver failure (ALF) is a devastating disease in which previously healthy children rapidly lose hepatic function due to a variety of causes and become critically ill within days. Management is largely supportive and only few conditions are amenable to directed therapy, such as acute acetaminophen toxicity. N-acetyl cysteine (NAC) replenishes mitochondrial and cytosolic glutathione stores and is the treatment of choice for acute acetaminophen toxicity. Studies in the past have shown some role of NAC in non-acetaminophen ALF [2,3].

The writing committee stated that there is increasing evidence for use of NAC infusion in non-acetaminophen causes of ALF [1]. They recommended routine use of NAC in the dose of 100 mg/kg/day in all cases of ALF irrespective of the etiology. This was based on a retrospective single site review involving 170 children done by Kortsalioudaki, *et al.* [2]. In this study NAC was associated with a shorter length of hospital stay, higher incidence of native liver recovery without transplantation, and better survival after transplantation.

However, a recent well designed placebo controlled trial conducted by the Pediatric Acute Liver Failure Study Group does not support the broad use of NAC in non-acetaminophen Pediatric ALF [4]. This multi-centre trial

included 184 children under the age of 18 years. The study group found that NAC did not improve 1-year survival in children with non-acetaminophen ALF. One-year liver transplant free survival was significantly lower in the NAC-treated group, especially among children less than 2 years of age with HE grade 0-1. This study emphasized the importance of conducting prospective pediatric drug trials.

With the availability of new evidence in recent literature, indiscriminate use of NAC in all cases of pediatric ALF is not justified.

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## Should N-acetylcysteine be used in Treatment of Non-acetaminophen Pediatric Acute Liver Failure?

In a recently published consensus statement on management of acute liver failure, the authors have

recommended the use of N-acetylcysteine in the treatment of children with non-acetaminophen pediatric acute liver failure [1]. Intravenous N-acetylcysteine (NAC) was incorporated into the general management of acute liver failure following a small uncontrolled study suggesting improved cardiovascular hemodynamics and oxygen transport in liver failure in adults [2]. In pediatric population, NAC became popular after a retrospective