

Splenic Abscess Treated with Percutaneous Aspiration

Splenic abscess is rare in children. An incidence of 0.2 to 0.7% has been reported in autopsy based studies(1). The recommended treatment has been a combination of total splenectomy and appropriate antibiotic therapy, with increasing use of percutaneous drainage as an alternative(2). We report a splenic abscess successfully managed with percutaneous aspiration.

A 10-year-old girl presented with high grade intermittent fever for 2 weeks and left lower chest pain for 4 days. There was no history of trauma. On examination she was febrile and had tenderness in left lower half of chest with diminished breath sounds in the same region. Hepatomegaly (4 cm) and tender splenomegaly (3 cm) were present. Rest of the examination was unremarkable. Investigations showed normal blood counts and a high ESR (60 mm fall in 1 hour). USG abdomen showed splenomegaly with a focal hypoechoic area measuring 15 mm in diameter. Widal test showed normal titers. Blood culture was sterile. Sickling test was negative. Chest X-ray showed elevated left hemidiaphragm. Lung parenchyma and costophrenic angles were normal. A presumptive diagnosis of splenic abscess was made and the child was started on Inj. ciprofloxacin and gentamicin. One week of antibiotic therapy did not result in significant improvement. A CT scan abdomen done at this stage showed splenomegaly with multiple well defined irregular hypodense non-enhancing areas, the largest one measuring 2.8 cm (*Fig. 1*), which was drained percutaneously. Pus culture was

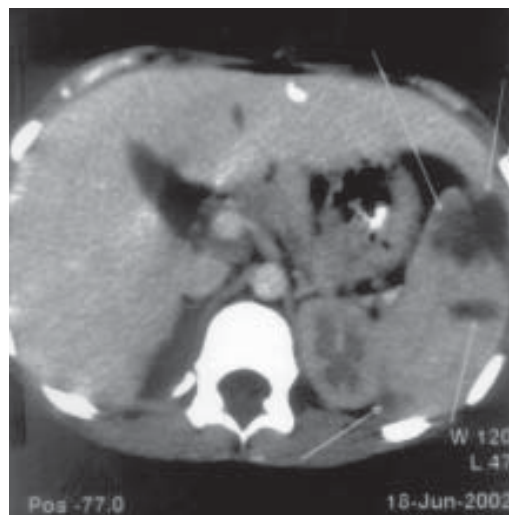


Fig. 1. CT scan abdomen showing splenomegaly with multiple well defined irregular hypodense non-enhancing areas.

sterile. AFB stain and Gram stain were negative. There was a significant improvement in the condition of the child following drainage of the abscess. She became afebrile with regression of hepatosplenomegaly. Antibiotic were continued for two more weeks. USG abdomen repeated twice during this period showed regression in the size of abscess in the first scan and a normal spleen with no hypoechoic areas in the next scan.

Splenic abscess may develop after generalized infection, hematological disorder and trauma. The commonest cause is hematogenous seeding of the spleen from an infective focus elsewhere in the body. Infecting microorganisms include gram positive bacteria, mycobacteria, fungi and anaerobes(3). USG detects large abscesses easily, but may miss the small abscesses. CT scan remains the gold standard for definitive diagnosis(4). CT is also useful for diagnostic/therapeutic aspiration. Recent trends in the management of a splenic abscess employ

techniques like percutaneous catheter drainage and fine needle aspiration of the abscess(3,5). In our case, needle aspiration with use of antibiotics resulted in cure. In children spleen should be preserved as far as possible. Aggressive surgical procedures like splenectomy should be reserved for the non-responders.

**T.S. Raghu Raman,
Daljit Singh,**
*Command Hospital (Air Force),
Bangalore 560 007, Karnataka, India.*

REFERENCES

1. Nelken N, Ignatius J, Skinner M, Christensen N. Changing clinical spectrum of splenic abscess - a multicentric study and review of the literature. *Am J Surg* 1987; 154: 27-34.
2. Rerbakken G, Schulz T, Swensen T. Splenic abscess - Diagnosis and treatment. *Tidsskr Nor Laegeforen* 1997; 117: 1908-1910.
3. Phillips GS, Radosevich MD, Lipsett PA. Splenic abscess: Another look at an old disease. *Arch Surg* 1997; 132: 1331-1335.
4. Smyrniotis V, Kehagias D, Voros D, Fotopoulos A, Lambrou A, Kostopanagiotou G, *et al.* Splenic abscess. An old disease with new interest. *Dig Surg* 2000; 17: 354-357.
5. van der Laan RT, Verbeeten B, Smits NJ, Lubbers MJ. Computed tomography in the diagnosis and treatment of solitary splenic abscess. *J Compt Assist Tomogr* 1989; 13: 71-74.

Prevalence of Undernutrition Amongst Children (6-9 Years) in Delhi

Limited data is available on the qualitative distribution of undernutrition amongst children 6-9 years of age in National Capital Territory (NCT) of Delhi. We conducted a study to provide an answer.

Keeping in view the anticipated underweight prevalence of 50%, a confidence interval of 95%, relative precision of 10% and a design effect of two, a sample size of 768 children was calculated. Thirty schools/ clusters were selected using 'population proportionate to size' cluster sampling methodology(1). In the identified schools, children were briefed about the objectives of the study and informed consent was taken. In each school (cluster), a minimum of 30

children were enrolled for the study. Anthropometric measurements of weight and height were recorded for each child using SECA electronic weighing scale and anthropometric height rod, respectively. The three indices of nutritional status *i.e.*, weight for age, height for age and weight for height were expressed in standard deviation units (z scores) from the National Council of Health Statistics (NCHS) median as specified by World Health Organization using the anthro pac software.

A total of 471 (48.7%) boys and 495 (51.2%) girls were included in the study. The percent of children underweight, stunted, and wasted were 52.5, 45.1 and 11.1%, respectively. It was observed that 9.7, 15.3, and 2.8% of the children were severely (< 3SD) underweight, stunted, and wasted, respectively. The prevalence of underweight and stunting was significantly higher in boys as compared to girls.