THE VALUE OF ULTRASOUND IN PEDIATRIC INTUSSUSCEPTION

Thesis

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by

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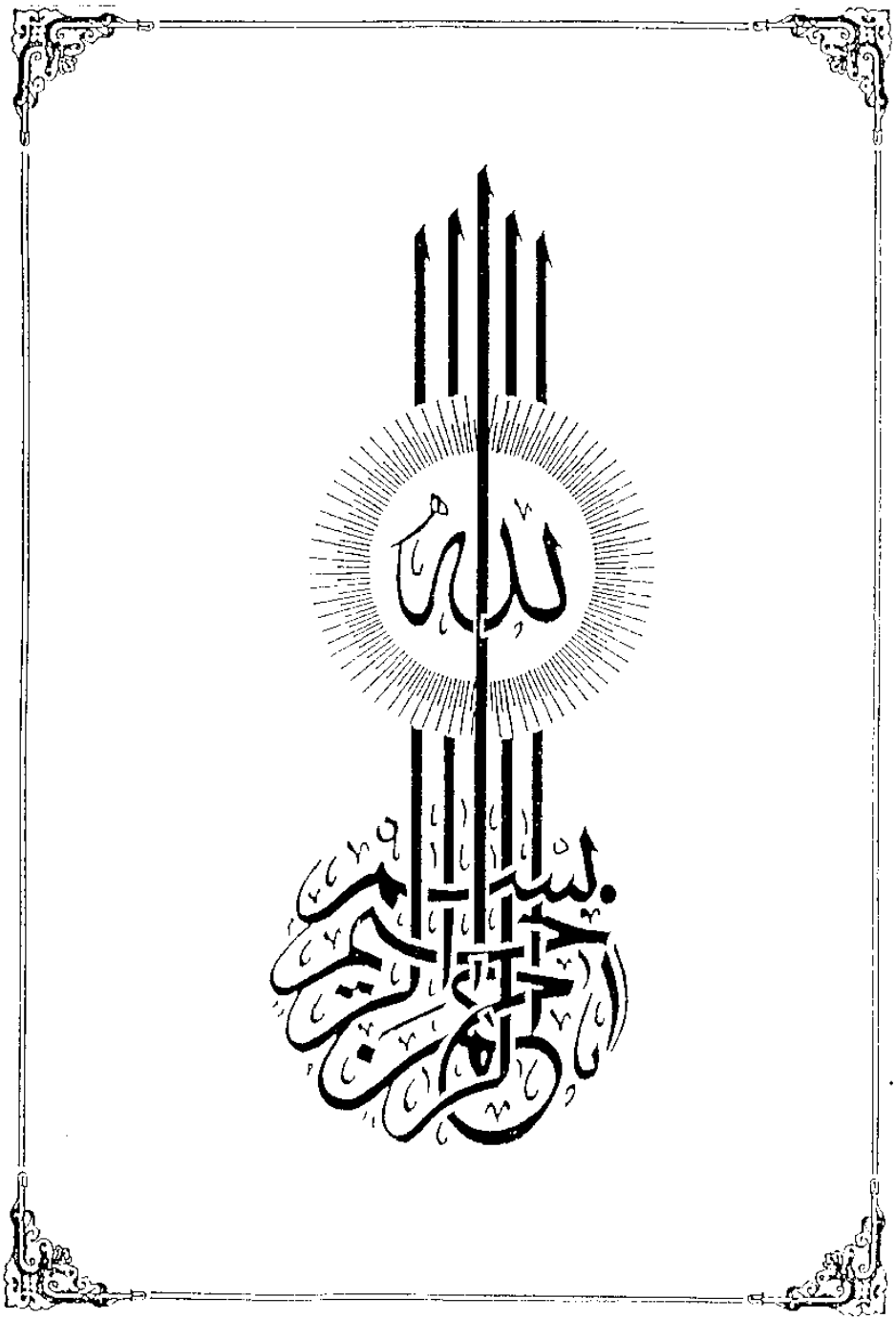
بسم الله الرحمن الرحيم

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Introduction and Aim of the Work

Intussusception is the most common cause of acute abdomen in infants . An early and correct diagnosis is necessary to reduce the morbidity and mortality from these conditions .

Classically , plain abdominal radiography and barium enema examination have been the only radiologic methods used in the diagnosis of intussusception .

Ultrasound is now evolving as a new method to diagnose and guide hydrostatic reduction with saline enema .

The aim of this study is to review and evaluate the value of ultrasound in diagnosis of intussusception in comparison to conventional methods and the possibility and success of reduction in each , with emphasis on the use of ultrasound in such conditions as it is a non invasive and easy modality with no exposure to ionizing radiation .


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Pathology of intussusception


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PATHOLOGY

Intussusception is the most common cause of intestinal obstruction between 3 months and 6 yr of age , it is rare in children younger than 3 months .The incidence varies from 1 - 4 pare 1000 live births . The male to female ratio is 4 : 1 . (Wyllie R. 1996).

The cause of most intussusceptions is unknown . The seasonal incidence has peaks in spring and autumn . Correlation with adenovirus infections has been noted , and the condition may complicate gastroenteritis . It is postulated that swollen peyer patches in the ileum may stimulate intestinal peristalsis in an attempt to extrude the mass , thus causing an intussusception . (Wyllie R. 1996).

Intussusception may result from a lead point such as a polyp or diverticulum that is pulled distally by peristaltic activity, but 95 % are idiopathic . The most common lead point is Meckel diverticulum , followed by polyp ,duplication, hemangioma , suture line , appendix , tumors (ie. Lymphoma), and ectopic pancreas . Idiopathic intussusception usually originates near the ileocecal junction , and it likely results from swollen hypertrophied peyer patches in the ileum serving as a lead point . Henoch-Schonlein purpura and meconium ileus equivalent may be associated with intussusception , usually in the small bowel. (Stevenson R.J. 1996) .