

小児の腹部スクリーニングの実際～成人との違いも含めて～：小児 初級

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抄 録

最初に筆者の実践してきた1980年代からの小児腹部超音波検査の普及活動、2000年代以降のハンズオンセミナーの経緯について述べた。小児、特に乳幼児は放射線感受性が高いので、常にALARAの原則を意識した診療を行うことが重要である。小児の消化器疾患の特徴は実質臓器疾患が少なく、消化管疾患が大部分である。腹部臓器のスクリーニングを健康診断、外来診療・救急外来、消化管エコーの各場面について小児と成人で比較してみた。外来診療・救急外来の小児と成人のスクリーニング法は想定する疾患に違いはあるが、基本的に同じと考えてよい。小児では健康診断と消化管エコーの時も、外来診療・救急外来とほぼ同じと考えてよい。小児領域に腹部エコーを普及する上で重要なことは1)リアルタイムに診断することの理解を深めることと、2)スクリーニングの大切さを伝えることである。小児では成人の消化器内科、泌尿器科、産婦人科が担当する領域、すなわち腹部全体を常にルーチンワークとすることである。腹部スクリーニングの手順について述べ、最低限記録すべき8画面を示した。また、急性腹痛の診療に対する考え方を示した。肝門部斜走査、右腎臓縦走査、左腎臓縦走査、下腹部横走査、下腹部縦走査の正常像との比較で注意すべき疾患について述べた。今後は小児疾患に詳しい小児科医と超音波検査に詳しい超音波検査士が協働し、小児領域の超音波検査を発展させていくことが望ましい。

Practical abdominal screening for children, including differences from adults: Pediatric beginner

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Abstract

First, we herein describe our activities to promote pediatric abdominal ultrasound since the 1980s, and the history of hands-on seminars conducted since the 2000s. Children, especially infants, are highly sensitive to radiation, so it is important to always treat them with the ALARA principle in mind. Pediatric digestive diseases are characterized by few solid organ diseases, and the majority are gastrointestinal diseases. We compare abdominal organ screening in children and adults in each setting of health checkups, outpatient care/emergency clinics, and gastrointestinal ultrasound. Although there are differences in the diseases assumed for screening methods for children and adults in outpatient care/emergency clinics, they can be considered to be basically the same. In children, health checkups and gastrointestinal ultrasound can be considered to be almost the same as in outpatient care/emergency clinics. The important thing in promoting abdominal ultrasound in pediatrics is to 1) deepen understanding of real-time diagnosis and 2) convey the importance of screening. In children, the area covered by adult gastroenterology, urology, and obstetrics and gynecology, that is, the entire abdomen, should always be routine work. The procedure for abdominal screening is herein described, and the minimum eight images that should be recorded are presented. Additionally, an approach to the treatment of acute abdominal pain is presented. Diseases that should be discontinued based on comparison with normal images of oblique hilar scan, right kidney vertical scan, left kidney vertical scan, lower abdominal transverse scan, and lower abdominal vertical scan are described. In the future, it would be desirable for pediatricians with expertise in pediatric diseases and ultrasound technicians with expertise in ultrasound examinations to work together to develop pediatric ultrasound examinations.

Keywords

child, abdominal ultrasound, noninvasive testing, abdominal screening, real-time diagnosis

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