

ACCURACY OF CONTRAST ENEMA FOR DIAGNOSING HIRSCHSPRUNG'S DISEASE IN DR. SARDJITO HOSPITAL YOGYAKARTA

ABSTRACT

Muhammad Irsan¹, Gunadi², Andi Dwihantoro²

¹Student of Medical Doctor, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada, ²Pediatric Surgery Division, Department of Surgery, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada/Dr. Sardjito Hospital, Yogyakarta, Indonesia.

Background: Hirschsprung's disease is a congenital disease characterized by the absence of intrinsic ganglion cells in the Meissner plexus and the Auerbach plexus in the colon. The diagnosis of Hirschsprung's disease must be established as early as possible to avoid complications, such as enterocolitis, intestinal perforation, and sepsis. Diagnosis of Hirschsprung's disease can be diagnosed through clinical examination, radiological examination, and histopathological examination. Radiological examination with contrast enema in Hirschsprung's disease will show the existence of a transition zone and abnormal rectosigmoid index (RI). This examination is not invasive and is available in most hospitals in Indonesia.

Objective: To determine the accuracy of contrast enema examination in diagnosing Hirschsprung's disease in Dr. Sardjito Hospital Yogyakarta.

Method: This study is a diagnostic test study to analyse diagnostic value of contrast enema examination in diagnosing hirschsprung disease by using the patient's medical records in Dr. Sardjito General Hospital from January 2017 to June 2018.

Results: A total of 84 samples were included in this study. Sensitivity, specificity, positive predictive value, negative predictive value, and accuracy rate for the transition zone were 83.78%, 80.00%, 96.88%, 40.00%, 83.33% respectively. Sensitivity, specificity, positive predictive value, negative predictive value, and accuracy rate for abnormal RI were 71.62%, 80.00%, 96.36%, 27.59%, 72.62% respectively. Sensitivity, specificity, positive predictive value, negative predictive value, and accuracy rate for the combination of transition zone and abnormal RI were 64.86%, 80.00%, 96.00%, 23.53%, 66.67% respectively.

Conclusion: The transition zone and abnormal RI are radiological findings on contrast enema examination that are quite accurate in diagnosing Hirschsprung's disease.

Keywords: Rectal Biopsy, Contrast Enema, Transition Zone, Rectosigmoid Index

AKURASI KONTRAS ENEMA UNTUK DIAGNOSIS PENYAKIT HIRSCHSPRUNG DI RSUP DR. SARDJITO YOGYAKARTA

INTISARI

Muhammad Irsan¹, Gunadi², Andi Dwihantoro²

¹Program Studi Kedokteran, Fakultas Kedokteran, Kesehatan Masyarakat, dan Keperawatan, Universitas Gadjah Mada, Yogyakarta, Indonesia, ²Divisi Bedah Anak, Departemen Ilmu Bedah, Fakultas Kedokteran, Kesehatan Masyarakat, dan Keperawatan, Universitas Gadjah Mada/RSUP Dr. Sardjito, Yogyakarta, Indonesia.

Latar Belakang: Penyakit Hirschsprung merupakan penyakit kongenital yang ditandai dengan tidak adanya sel ganglion intrinsik pada pleksus Meissner dan pleksus Auerbach di kolon. Diagnosis penyakit Hirschsprung harus ditegakkan sedini mungkin untuk menghindari komplikasi, seperti enterokolitis, perforasi usus, dan sepsis. Diagnosis penyakit Hirschsprung dapat ditegakkan melalui pemeriksaan klinis, pemeriksaan radiologi, dan pemeriksaan histopatologi. Pemeriksaan radiologi dengan kontras enema pada penyakit Hirschsprung akan menunjukkan keberadaan zona transisi dan rasio rektosigmoid (RR) abnormal. Pemeriksaan ini tidak invasif dan tersedia disebagian besar rumah sakit di Indonesia.

Tujuan: Untuk mengetahui akurasi pemeriksaan kontras enema dalam mendiagnosis penyakit Hirschsprung di RSUP Dr. Sardjito Yogyakarta.

Metode: Penelitian ini merupakan penelitian uji diagnostik untuk menganalisis nilai diagnostik kontras enema dalam penegakan diagnosis penyakit Hirschsprung dengan menggunakan data dari rekam medis pasien RSUP Dr. Sardjito periode Januari 2017 sampai Juni 2018.

Hasil: Sebanyak 84 sampel dimasukkan dalam penelitian ini. Sensitivitas, spesifisitas, nilai duga positif, nilai duga negatif, dan akurasi untuk zona transisi berturut-turut 83,78%, 80,00%, 96,88%, 40,00%, 83,33%. Sensitivitas, spesifisitas, nilai duga positif, nilai duga negatif, dan akurasi untuk RR abnormal berturut-turut 71,62%, 80,00%, 96,36%, 27,59%, 72,62%. Sensitivitas, spesifisitas, nilai duga positif, nilai duga negatif, dan akurasi untuk kombinasi zona transisi dan RR abnormal berturut-turut 64,86%, 80,00%, 96,00%, 23,53%, 66,67%.

Kesimpulan: Zona transisi dan RR abnormal merupakan temuan radiologis pada pemeriksaan kontras enema yang cukup akurat dalam mendiagnosis penyakit Hirschsprung.

Kata kunci: Biopsi Rektum, Kontras Enema, Zona Transisi, Rasio Rektosigmoid