

ABSTRAK

Pemeriksaan Biopsi Hisap Rektum Dengan Pulasan Histokimia Acetylcholinesterase Untuk Mendiagnosis Penyakit Hirschsprung

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Latar Belakang: Biopsi hisap rektum dengan pulasan histokimia Acetylcholinesterase merupakan alat diagnostik yang sangat penting untuk mendiagnosis penyakit Hirschsprung. Saat ini di penegakan diagnosa penyakit Hirschsprung di RS dr Soetomo menggunakan biopsi rektal dengan pulasan Hematoxilin&Eosin. Pemeriksaan dengan menggunakan pulasan H&E ini memiliki banyak kekurangan diantaranya sulit mendeteksi sel ganglion yang *imature* dan distribusi yang tidak merata, sehingga identifikasinya sulit. Belum ada publikasi tentang pemeriksaan biopsi hisap rektum dengan pulasan Acetylcholinesterase di Indonesia.

Tujuan: Untuk mengetahui nilai diagnostik pemeriksaan biopsi hisap rektum dengan pulasan histokimia Acetylcholinesterase dalam mediagnosis penyakit Hirschsprung.

Metode: Cros sectional study dilakukan di RSUD Dr Soetomo pada bulan April-Agudtus 2015 pada anak usia 14 hari sampai 6 tahun 11 bulan dengan kecurigaan penyakit Hirschsprung. Biopsi hisap rektum dilakukan simultan dengan *full-thickness biopsy* kemudian dilakukan pulasan dengan Acetylcholinesterase. Hasil dikatakan positif penyakit Hirschsprung jika didapatkan kenaikan aktifitas Acetylcholinesterase.

Hasil: Terdapat 10 sampel pasien yang dicurigai dengan Hirschsprung, 6 diantaranya positif dan 2 negatif. Satu negatif palsu ditemukan karena masalah tehnik dan satu positif palsu ditemukan pada neonatus usia 14 hari. Biopsi hisap rektum dengan pulasan Acetylcholinesterase ini memiliki angka sensitifitas 85,7% dan sensitifitas 66,7%.

Kesimpulan: Biopsi hisap rektum dengan pulasan histokimia *Acetylcholinesterase* bisa digunakan sebagai alat diagnostik untuk mendiagnosis penyakit Hirschsprung.

Kata Kunci: *Acetylcholinesterase, Biopsi hisap rektum, Penyakit Hirschsprung,*

ABSTRACT

Rectal suction biopsy with Acetylcholinesterase Histochemical for diagnostic of Hirschsprung disease

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Background: Rectal suction biopsy with Acetylcholinesterase histochemical staining is very important diagnostic tool to diagnose Hirschsprung's disease. Currently in the diagnostic enforcement of Hirschsprung disease in Soetomo hospital is using rectal biopsy with Hematoxilin and eosin staining. Hematoxilin and Eosin staining has many shortcomings including difficulty in identification of the imature ganglion cells and uneven distribution. There has been no publication of rectal suction biopsy with Acetylcholinesterase staining in Indonesia.

Objective: To determine the diagnostic value of rectal suction biopsy with Acetylcholinesterase histochemical staining in diagnosing of Hirschsprung's disease.

Methods: Cros-sectional study was conducted at the Dr Soetomo hospital in April to Agustus 2015 with 14 day old to 7 year old children suspicion of Hirschsprung's disease. Rectal suction biopsy was done simultaneously with full-thickness biopsy, both of this methods use Acetylcholinesterase staining. The histochemical criteria of Hirschsprung's disease was Acetylcholinesterase increasing in mucosa and submucosa of colon which marked by the presence of many cholinergic fibers.

Results: There were 10 samples of suspected patients with Hirschsprung's disease, 6 samples were positive and 2 samples were negative. One sample was false negative due to technical problems and one sample in 14 days old was false positive. Rectal suction biopsy with Acetylcholinesterase staining have a sensitivity figure of 85.7% and spesitivity of 66.7%.

Conclusions: Rectal suction biopsy with Acetylcholinesterase histochemical staining can be used as a diagnostic tool in diagnosing of Hirschsprung's disease.

Keywords: Acetylcholinesterase, Rectal suction biopsy, Hirschsprung's disease.