

ABSTRAK

Latar belakang: Penyakit Hirschsprung (HSCR) merupakan penyebab utama obstruksi usus, ditandai dengan tidak adanya sel ganglion parasimpatis, yaitu pleksus submukosa Meissner dan pleksus mienterikus Auerbach, pada dinding usus. Tindakan operasi, diantaranya Soave dan Duhamel, dilakukan untuk mengurangi morbiditas dan mortalitas HSCR. Tindakan operasi biasanya dilakukan pada masa anak-anak. Hal ini dapat mempengaruhi pertumbuhan anak.

Tujuan: Membandingkan luaran pertumbuhan jangka panjang pasien HSCR pra operasi dan pasca operasi Soave dan Duhamel.

Metode: Penelitian observasional dengan metode kohort retrospektif dan prospektif. Variabel yang dibandingkan adalah luaran pertumbuhan jangka panjang pasien HSCR pasca Soave dan Duhamel, yang menjalani operasi dari tahun 2012-2015, dengan total 11 subyek, terdiri atas kelompok Soave (n=7) dan Duhamel (n=4). Luaran yang diukur berupa status nutrisi dengan indikator *weight-for-age* dan *BMI-for-age*. Data berupa tinggi badan dan berat badan diolah dengan kurva pertumbuhan WHO dan tabel pertumbuhan WHO, ditampilkan dalam kategori dan angka *z-score*.

Hasil: Rentang waktu pengukuran di antara pasien HSCR kelompok Soave dan Duhamel adalah 4,6 dan 4,8 tahun, secara berturut-turut. Ada perbedaan luaran pertumbuhan jangka panjang pada pasien HSCR pasca operasi Soave, tetapi tidak ada perbedaan pada kelompok Duhamel. Status gizi pasien HSCR kelompok Soave ada yang membaik (57,1%), tetap (14,3%), dan memburuk (28,6%), sedangkan pada kelompok Duhamel ada status gizi pasien yang membaik (25%) dan tetap (75%). Peningkatan angka *z-score* (42,9%) dan penurunan angka (57,1%) dialami oleh pasien HSCR di kelompok Soave, sedangkan di kelompok Duhamel pasien mengalami peningkatan angka *z-score* (50%) dan penurunan angka (50%).

Kesimpulan: Ada perbedaan status gizi pra dan pasca operasi pada prosedur Soave, tetapi tidak ada perbedaan pada prosedur Duhamel, dan ada perbedaan status gizi di antara kedua prosedur, baik secara kategorikal dan angka.

Kata kunci: Hirschsprung, Soave, Duhamel, pertumbuhan, luaran, jangka panjang

ABSTRACT

Background: Hirschsprung disease (HSCR) is the main cause of intestinal obstruction, characterized by the absence of parasympathetic ganglion cells, namely the Meissner submucosal plexus and Auerbach myenteric plexus, on the intestinal wall. Surgical treatments, such as Soave and Duhamel, were carried out to reduce morbidity and mortality of HSCR. Surgery is usually done in childhood. This can affect the growth of children.

Objectives: To compare the long-term growth outcomes of preoperative HSCR patients and post Soave and Duhamel surgeries.

Methods: An observational study with a retrospective and prospective cohort method. The variables compared were the long-term growth outcomes of HSCR patients after Soave and Duhamel, who underwent surgery from 2012-2015, with a total of 11 subjects, consisting of Soave (n = 7) and Duhamel groups (n = 4). Output measured is nutritional status with weight-for-age indicators and BMI-for-age indicators. Data in the form of height and weight were processed with the WHO growth curve and WHO growth table, displayed in categories and z-score numbers.

Results: The measurement ranges between HSCR patients in the Soave and Duhamel groups are 4.6 and 4.8 years, respectively. Long-term growth outcomes in HSCR patients after Soave and Duhamel operations are different and same, respectively, with the preoperative ones. The nutritional status of HSCR patients in Soave group improved (57.1%), remained (14.3%), and worsened (28.6%), whereas in Duhamel group, there are patients' nutritional status who improved (25%) and remained (75%). An increase in z-score (42.9%) and a decrease in z-score numbers (57.1%) were experienced by HSCR patients in the Soave group, while in the Duhamel group, patients experienced an increase in z-score (50%) and a decrease in numbers (50%).

Conclusions: There are differences in the nutritional status of preoperative and postoperative in Soave procedure, but no differences in Duhamel procedure, and there are differences in nutritional status between the two procedures, both categorically and numerically.

Keywords: Hirschsprung, Soave, Duhamel, growth, outcomes, long term