

HASIL GUNA LARUTAN IRIGASI HIDUNG RINGER LAKTAT DIBANDINGKAN NACL 0,9% PADA PASIEN RINOSINUSITIS KRONIS PASCA BEDAH SINUS ENDOSKOPI FUNGSIONAL

INTISARI

Latar Belakang: Rinosinusitis kronik (RSK) banyak mengenai populasi dan dapat mempengaruhi kesehatan dan kualitas hidup penderitanya. Pengobatan pasien RSK yang gagal dengan terapi medikamentosa adalah bedah sinus endoskopi fungsional (BSEF) dilanjutkan perawatan pasca operasi menggunakan cuci hidung dengan larutan NaCl 0,9%. Namun, belum ada baku emas jenis larutan cuci hidung dan perbandingan efek berbagai larutan berbasis garam pasca operasi, salah satunya Ringer Laktat (RL) yang juga mudah ditemukan pada praktek sehari-hari.

Tujuan: Mengetahui hasil guna larutan irigasi hidung RL dibandingkan NaCl 0,9% pada pasien rinosinusitis kronis pasca bedah sinus endoskopi fungsional.

Metode: Metode yang digunakan adalah *Randomized Controlled Trial* (RCT) *double-blinded* pada pasien RSK yang menjalani BSEF dan dilakukan pencatatan parameter subyektif menggunakan kuesioner *Sinonasal Outcome Test-22* (SNOT-22) dan parameter obyektif menggunakan *Lund-Kennedy endoscopic scoring system* (LKES) pada saat pre operasi, pasca operasi minggu 2, minggu 4, dan minggu 8 di Poliklinik THT-KL RSUP Dr. Sardjito Yogyakarta selama bulan Agustus 2020 hingga Maret 2021. Data dianalisis menggunakan *chi-square*, *independent t-test*, dan *Mann-Whitney test*.

Hasil: Terdapat total 40 pasien sebagai subyek penelitian. Terdapat perbaikan rerata skor SNOT-22 dari saat pre operasi dibandingkan setelah tindakan BSEF (minggu 2) menunjukkan penurunan skor hingga mencapai 50% pada masing-masing kelompok, kemudian cenderung menetap sampai dengan minggu 8. Perbandingan Skor LKES baik secara skor total keseluruhan maupun masing-masing penilaian yang meliputi (1)polip, (2)edema, (3)sekret, (4)jaringan parut, dan (5)krusta pada kelompok RL (perlakuan) sebanding dengan kelompok kontrol (NaCl 0,9%) dengan nilai $p > 0,05$.

Kesimpulan: Larutan irigasi hidung RL tidak lebih berhasil guna dibandingkan NaCl 0,9% pada pasien rinosinusitis kronis pasca bedah sinus endoskopi fungsional, namun secara klinis RL dapat digunakan sebagai alternatif pilihan jenis larutan hidung selain NaCl 0,9% yang telah direkomendasikan dari pedoman tatalaksana RSK *European Position Paper on Rhinosinusitis and Nasal Polyps* (EPOS) 2012.

Kata Kunci: Rinosinusitis Kronis, Irigasi Hidung, Natrium Klorida, Ringer Laktat, Endoskopi.

***EFFICACY OF NASAL IRRIGATION USING RINGER'S LACTATE AND
SODIUM CHLORIDE 0,9% SOLUTION IN CHRONIC RHINOSINUSITIS
AFTER FUNCTIONAL ENDOSCOPIC SINUS SURGERY***

ABSTRACT

Background: Chronic rhinosinusitis (CRS) affects the population a lot and can impacts the health and quality of life of the affected individual. For patients who fail medical therapy, functional endoscopic sinus surgery (FESS) has been shown to be beneficial, which followed by postoperative care using nasal irrigation using NaCl 0,9% solution. However, there is no gold standard for the type of nasal irrigation solution and the comparison of the efficacy of various salt-based solutions postoperatively, one of them is Ringer's Lactate which is also easily found in daily practice.

Objective: To determine the use of nasal irrigation RL compared to NaCl 0,9% solution in chronic rhinosinusitis after functional endoscopic sinus surgery.

Methods: The method used was a double-blinded randomized controlled trial (RCT) in CRS patients who underwent FESS and were reviewed of subjective parameters using the Sinonasal Outcome Test-22 (SNOT-22) questionnaire and objective parameters using the Lund-Kennedy endoscopic scoring system (LKES) at the time of preoperative, postoperative at weeks 2, 4, and 8 at the ENT-HNS outpatient clinic in Sardjito General Hospital Yogyakarta during August 2020 to March 2021. Data were analyzed using chi-square, independent t-test, and Mann-Whitney test.

Results: Forty patients were recruited. There was an improvement in the mean of SNOT-22 score from preoperative compared to after FESS (week 2) showed a decrease up to 50% in each group, then tended to stable score until week 8. Comparison of LKES both overall and each assessment which included (1)polyp, (2)edema, (3)discharge, (4)scarring, and (5)crusting in the RL group (treatment) was comparable to the control group (NaCl 0.9%) with p -value > 0.05 .

Conclusion: Nasal irrigation using RL is not more effective than NaCl 0,9% solution in chronic rhinosinusitis after functional endoscopic sinus surgery, but RL can be used clinically as an alternative to nasal solution other than NaCl 0,9% which has been recommended from European Position Paper on Rhinosinusitis and Nasal Polyps (EPOS) 2012 of CRS management guidelines.

Keywords: Chronic Rhinosinusitis, Nasal Irrigation, Sodium Chloride, Ringer's Lactate, Endoscopy.