"Nilai Tambah" Terapi Hidung pada Standar Pasien Covid-19 dengan Gangguan Penghidu: Uji Klinik Acak Terkontrol Pendahuluan = "Additional Value of Nasal Therapy in Standing Therapy for Covid-19 Patient with Oufactory Dusirders: A Preliminary Randomized Controlled Clinical Trial

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Abstrak

Latar belakang: SARS-CoV2, virus yang menyebabkan COVID-19 merupakan masalah kesehatan terbesar yang dihadapi dunia dewasa ini. Gangguan penghidu dan pengecap saat ini telah diakui menjadi suatu entitas gejala pada COVID-19 namun studi terkait evaluasi objektif dan tata laksana gangguan ini masih sangat terbatas.

Tujuan penelitian: Mengetahui gambaran klinis gangguan penghidu pada COVID-19 berdasarkan uji penghidu alkohol (UPA) dan uji penghidu intravena (UPI) serta efektifitas terapi hidung sebagai tambahan terapi standar pasien COVID-19 dengan gangguan penghidu.

Metode: Penelitian ini merupakan uji klinis acak terkontrol paralel dengan penyamaran tunggal pada 2 kelompok menggunakan 24 pasien terkonfirmasi COVID-19 yang mengalami gangguan penghidu dan dirawat di RS Cipto Mangunkusumo periode Juli-Oktober 2020. Penapisan gangguan penghidu menggunakan UPA dan dilanjutkan dengan UPI. Protokol terapi hidung yang digunakan terdiri dari steroid intranasal, cuci hidung Nacl 0,9%, dekongestan topikal dan balsam aromatik selama 2 minggu kemudian dilakukan analisis statistik perbedaan delta pada hasil pemeriksaan UPA dan UPI menggunakan Uji T independent atau Uji Mann Whitney.

Hasil: Terdapat 4 subyek yang keluar dari penelitian dan analisis akhir dilakukan hanya pada 10 subyek per kelompok. Pada pengukuran awal didapatkan rerata nilai pengukuran UPA yang terganggu (kontrol 5,13 ± 3,79; terapi 2,6 ± 2,23). Pada pemeriksaan UPI didapatkan perlambatan onset UPI {kontrol 26 (8-300); terapi :131,5 (20-300)} penurunan nilai durasi {(kontrol:111 (0-182); terapi:44 (0-70)}. Uji perbedaan delta semua variabel pasca terapi didapatkan bahwa terdapat hasil perbedaan signifikan pada onset UPI kelompok terapi ($p<0,001$) dibandingkan kontrol. Terdapat peningkatan persentase perbaikan semua biomarka: UPA (170,13%), onset UPI (13,45%), dan durasi UPI (32,82%) pada kelompok terapi dibandingkan dengan kelompok kontrol dengan keunggulan persentase >10%.

Kesimpulan: Karakteristik gambaran gangguan penghidu pada subyek COVID-19 pada penelitian ini sesuai dengan jenis gangguan penghidu sensorineural. Subyek pada kedua kelompok mengalami perbaikan gangguan penghidu pasca follow up 2 minggu. Pemberian terapi hidung memberikan nilai tambah dengan bukti awal perbaikan pada nilai onset UPI dibanding pemberian terapi standar saja.
.....Background: SARS-CoV2, the virus that causes COVID-19, makes the disease biggest health problem the world facing today. Smell and taste disorders are currently recognized as a symptom entity in COVID-

19, but studies related to objective evaluation and management of this disorder are still very limited.

Aim : To evaluate the clinical presentation of olfactory disorders in COVID-19 based on the alcohol sniff test (AST) and the intravenous olfaction test (IOT) and the effectiveness of the nasal therapy protocol as an adjunct to standard therapy in COVID-19 patients with olfactory disorders.

Methods: This study was a two-group single-blind randomized trial of 24 COVID-19 patients with olfactory disorders in Cipto Mangunkusumo General Hospital from July to October 2020. Assestment of olfactory function in this study was performed using AST and IOT. Screening for olfactory disorders performed using AST and followed by IOT. The nasal therapy used consisted of intranasal steroids, Nacl 0,9% nasal washing, topical decongestants and aromatic balms for 2 weeks. Statistical analysis of delta differences was carried based on the results of AST and IOT using independent T test or Mann Whitney test.

Results: Four subject were lost to follow up. The final analysis was performed on each 10 subjects per group. The initial measurement showed all subjects included in this study have decreased AST value (control: 5.13 ± 3.79; therapy: 2.6 ± 2.23). Late onset IOT {control: 26 (8-300); therapy: 131.5 (20-300)}, decreased duration {(control: 111 (0-182); therapy: 44 (0-70)}. Statistical tests of delta differences of all post-therapy variabel found that there were significant results on delta IOT latency in the treatment group ($p < 0.001$). There were difference of the percentage improvement of AST (170.13%), IOT onset (13.45%), and duration of IOT (32.82%) in the therapy group compared to the control group. with a percentage advantage >10%.

Conclusion: The characteristics of the olfactory disorder in COVID-19 subjects in this study were in accordance with the type of sensorineural olfactory disorders. Both subject of two groups have showed improvement in two weeks follow up. The administration of a nasal therapy provides early evidence of improvement in the IOT onset value compared to standard therapy alone.