

ABSTRACT

Background. Inhaled turbuhaler containing budesonide 160 mcg/formoterol fumarate 4.5 mcg is the most frequently prescribed for post-hospitalized patients at the Respira Pulmonary Hospital, but there are no data regarding the effectiveness of the drug. The aim of this study was to determine the effect of administration inhaled turbuhaler containing budesonide 160 mcg/formoterol fumarate 4.5 mcg on the incidence of COPD-related rehospitalization within 6 months after discharged when compared to inhaled diskus containing fluticasone propionate 250 mcg/salmeterol xinafoate 50 mcg.

Method. This observational study with a retrospective cohort design used medical record data from patients at the Respira Pulmonary Hospital for the period of January 1, 2019 – December 31, 2020. The effect of administration inhaled turbuhaler budesonide/formoterol fumarate and a inhaled diskus fluticasone propionate/salmeterol xinafoate on the incidence of COPD-related rehospitalization within 6 months after discharged was analyzed by Kaplan-Meier test. The effect of confounding variables on the incidence of COPD-related rehospitalization within 6 months after discharged was analyzed using the Cox Proportional Hazard Model.

Results. In the study, 190 samples were obtained which were divided into 2 groups, namely the Bud/Form inhalation group (n=95) and the FP/Salm inhalation group (n=95). The results of the survival analysis showed a greater survival percentage of the inhalation of Bud/Form (87.4%) than the inhalation of FP/Salm (83.2%) but not significantly different (p value 0.442). Multivariate analysis involving the confounding variables showed a decrease in hazard but not significant in the use of inhalation Bud/Form compared to FP/Salm (HR 0.689; 95% CI 0.313-1.517; p value 0.355).

Conclusion. The percentage of survival to COPD-related rehospitalization within 6 months of using inhaled budesonide/formoterol fumarate was greater than inhaled fluticasone propionate/salmeterol xinafoate without any significant difference. Both inhaled ICS/LABA preparations can still be recommended as controller therapy in COPD patients.

Keywords: COPD, readmission, rehospitalization, ICS, LABA

INTISARI

Latar Belakang. Inhalasi turbuhaler budesonid 160 mcg/formoterol fumarat 4,5 mcg merupakan obat yang paling sering diresepkan bagi pasien *post-rawat inap* di RS Paru Respira, namun belum ada data terkait efektivitas penggunaan obat. Tujuan penelitian ini adalah mengetahui pengaruh pemberian inhalasi budesonid 160 mcg/formoterol fumarat 4,5 mcg terhadap kejadian rehospitalisasi PPOK dalam 6 bulan setelah rawat inap jika dibandingkan dengan inhalasi flutikason propionat 250 mcg/salmeterol xinafoat 50 mcg.

Metode . Penelitian observasional dengan desain kohort retrospektif ini menggunakan data rekam medik pasien RS Paru Respira periode KRS 1 Januari 2019 – 31 Desember 2020. Efektivitas penggunaan obat pulang inhalasi budesonid /formoterol fumarat dan inhalasi flutikason propionat /salmeterol xinafoat terhadap kejadian rehospitalisasi terkait PPOK dalam 6 bulan setelah KRS dianalisis dengan *Kaplan-Meier test*. Pengaruh variabel perancu terhadap kejadian rehospitalisasi PPOK dalam 6 bulan setelah KRS dianalisis dengan *Cox Proportional Hazard Model*.

Hasil. Pada penelitian diperoleh sebanyak 190 sampel yang terbagi dalam 2 kelompok yaitu kelompok inhalasi Bud/Form ($n=95$) dan kelompok inhalasi FP/Salm ($n=95$). Hasil *survival analysis* menunjukkan persentase yang lebih besar pada inhalasi Bud/Form (87,4%) dibanding pada inhalasi FP/Salm (83,2%) namun tidak berbeda bermakna (p value 0,442). Analisis multivariat dengan melibatkan pengaruh variabel perancu menunjukkan penurunan *hazard* namun tidak bermakna pada penggunaan inhalasi Bud/Form dibanding FP/Salm (HR 0,689; 95% CI 0,313-1,517; p value 0,355).

Kesimpulan. Persentase ketahanan terhadap rehospitalisasi terkait PPOK dalam 6 bulan pada penggunaan inhalasi budesonid/formoterol fumarat lebih besar dibanding pada penggunaan inhalasi flutikason propionat/salmeterol xinafoat tanpa beda bermakna. Kedua sediaan inhalasi ICS/LABA tersebut tetap dapat direkomendasikan sebagai terapi pengontrol pada pasien dengan PPOK.

Kata kunci: PPOK, readmisi, rehospitalisasi, ICS, LABA