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## Are our Asthma Patients using their Inhalers Correctly?

Barış Çil<sup>1</sup>, Mehmet Kabak<sup>1</sup>, Ayşe Füsun Topçu<sup>2</sup>, Mahşuk Taylan<sup>2</sup>, Cengizhan Sezgi<sup>2</sup>

<sup>1</sup>Mardin State Hospital, Mardin, Turkey <sup>2</sup>Dicle University School of Medicine, Diyarbakır, Turkey

**Objectives:** The percentage of asthma patients that use their inhalers with the correct technique ranges between 10 and 60. Inappropriate use of inhaler leads to disuse of drug, diminished disease control and increased drug use. The present study underlines the importance of inhaler using technique in asthma treatment and control and aims to assess the effect of inhaler using technique on the hospitalization of asthma patients.

Methods: One hundred and sixty five asthma patients over 18 years of age that applied to either in- or out-patient clinics of a university hospital, that had a diagnosis of asthma according to the criteria of GINA (the Global Initiative for Asthma) and had been attack-free for at least one month were included. Patients were told to use their inhalers and any misuse were noted. Patients that were attack-free for at least one month and were so at the time of visit were put through the Asthma Control Test (ACT). Their FEV1 and PEF values were also noted. Their hospitalization status for asthma in the last year was assessed and recorded. The association between ACT score, FEV1 percentage and PEF percentage and correct use of inhaler drugs were statistically significant. Hospitalization rate due to asthma attacks in the last year were not significantly associated with correct use of inhaler; yet the correct use group had lower rate of hospitalization.

**Results:** One hundred patients used their asthma inhalers correctly, while 65 did not. Those that used their inhalers correctly had significantly higher ACT (p=0.001), FEV1% (p=0.02) and PEF% (p=0.05). Those that used their inhalers correctly had lower numbers of asthma-related hospitalization in the last year (p=0.06).

**Conclusion:** Patients must be informed and trained for the correct use of their inhaler drugs. Patients seem to be under-informed on this subject and there are serious mistakes of use for all inhaler types. Correct use of inhalers leads to better control of disease, lower rate of asthma-related hospitalization, less drug waste and decreased treatment cost. PEF: % (84±19 75±22). FEV1: % (90±21 79±20).

Keywords: Asthma, treatment, inhaler