



Tetanus Risk in Migrants: a Case of Tetanus with Recovery in a Migrant Patient

Göçmenlerde Tetanoz Riski: Göçmen Bir Hastada İyileşen Tetanoz Vakası

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Dear Editor,

A comprehensive immunization program is in place in our country against tetanus, a preventable but potentially fatal disease. In this way, no deaths due to neonatal tetanus have been reported since 2014.^[1] However, it has drawn our attention that tetanus cases continue to be reported in older children and adults and that the common factor in these cases is migrant patients.^[2] In addition, the case of tetanus, which we diagnosed in a migrant patient in our clinic, directed us to examine this issue. A 25-year-old migrant male patient presented to our emergency department with a contraction in his jaw. The patient had fallen off the bike ten days ago and was presented to another hospital because of a cut in his ear. There, it was learned that the incision was sutured, but the patient was not vaccinated against tetanus. The patient did not have a tetanus vaccine and could not remember having childhood vaccinations in his country. On physical examination, the patient had a Glasgow coma scale score of 15, and signs of trismus and risus sardonicus were observed. There was a clean, 2-centimeter sutured wound on his left ear. The patient was started on 750IU human-derived tetanus immunoglobulin, tetanus vaccine, and metronidazole 500 milligrams 4x1 intravenous treatments, and was admitted to the intensive care unit. On the second day, the patient had increased spasms in the jaw and stiffness in the abdominal muscles, and he was intubated. The patient was discharged with healing after 29 days of hospital follow-up.

As in the world, the migrant population has health problems in our country, and the Ministry of Health is working on vaccinations, especially for children. Despite

this, there is evidence in the literature that vaccination and immunization are still insufficient. In a recent study of 2827 migrant children, it was shown that although 74% of children aged 0–4 was born in Turkey, 20.3% of them were never vaccinated.^[3] In addition, the World Health Organization has reported that 3.6% of pregnant women were not vaccinated against tetanus, and 37.1% of children aged 0–59 months were not vaccinated with a combined tetanus, diphtheria, and acellular pertussis vaccine in a pilot study.^[4] In similar studies around the world, it has been shown that the number of migrants who do not have protective antibodies against tetanus is still high and that the antibody titers of those with protective antibodies decrease with age.^[5] Low economic status, language problems, and educational problems limit migrants' access to health services. It is undeniable that these problems can also complicate immunization against tetanus. Turkey is one of the countries with the highest number of migrants in the world, and there are currently over 3.5 million migrants in the country.^[3,4] Considering these factors, it is an acceptable hypothesis that the need for immunization against tetanus in migrant individuals is still high. As we saw in a patient in our clinic, the continued reporting of tetanus cases in migrants in our country is an important example of this. In conclusion, we would like to remind and emphasize the importance of questioning tetanus immunization, especially in migrant patients presenting with trauma.

Keywords: Tetanus, migrant, immunization



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REFERENCES

1. Nayir T, Nazlican E, Şahin M, Kara F, Meşe EA. Effects of immunization program on morbidity and mortality rates of vaccine-preventable diseases in Turkey. *Turk J Med Sci* 2020;50(8):1909-1915.
2. Aksel G, İslam MM, Eroğlu SE, Özen C, Sektioğlu BK. Tetanus in refugee patients: Two cases and review of the literature. *Turk J Emerg Med* 2019;19(4):149-151.
3. Öztaş D, Kurt B, Akbaba M, Akyol M, Mollahaliloğlu S, Topaç O. Vaccination rates for Syrian population under temporary protection in Turkey. *Cent Eur J Public Health*. 2020;28(2):130-134.
4. Mipatrini D, Balcılar M, Dembech M, Ergüder T, Ursu P. Survey on the health status, services utilization, and determinants of health: Syrian refugee population in Turkey. World Health Organization Regional Office for Europe [WHO/EURO:2019-3472-43231-6059] 2019.
5. Affanni P, Colucci ME, Capobianco E, et al. Immunity status against tetanus in young migrants: a seroprevalence study. *Acta Biomed* 2020;91:77-84