

## Peutz-Jeghers Syndrome: A Very Rare Cause of Iron Deficiency Anemia

Peutz-Jeghers Sendromu: Demir Eksikliği Anemisinin Nadir Bir Nedeni

© Fatma Demir Yenigürbüz<sup>1</sup>, © Ugur Deveci<sup>2</sup>, © Ebru Tuncez<sup>3</sup>

<sup>1</sup>Şanlıurfa Training and Research Hospital, Clinic of Pediatric Hematology, Şanlıurfa, Turkey

<sup>2</sup>Şanlıurfa Training and Research Hospital, Clinic of Pediatric Gastroenterology, Şanlıurfa, Turkey

<sup>3</sup>Şanlıurfa Training and Research Hospital, Clinic of Medical Genetics, Şanlıurfa, Turkey



Figure 1. Multiple small, flat brown-violet pigmentations on the patient's buccal mucosa and lips and brown spotty pigmentations on the lip mucosa.



Figure 2. Similar mucocutaneous pigmentation of the patient's mother.



Figure 3. Polyps were revealed in the patient's gastrointestinal endoscopic examination.



An 11-year-old boy was admitted to the clinic with a 1-year history of fatigue and abdominal pain. In physical examination, there were multiple small, flat brown-violet pigmentations on his buccal mucosa and lips and brown spotty pigmentations on the lip mucosa, present since his birth (Figure 1). His mother also had similar mucocutaneous pigmentation and was operated on for intestinal polyps (Figure 2).

Laboratory findings were consistent with severe iron deficiency anemia and the fecal occult blood test was positive. Gastrointestinal endoscopic examination revealed two polyps of the stomach and three polyps of the jejunum that caused bleeding were removed with forceps (Figure 3).

Histopathologic examination revealed hamartomatous polyps. The presence of brown pigmentations and multiple gastrointestinal polyps alerted us to a possible diagnosis of Peutz-Jeghers syndrome and serine/threonine kinase 11 (STK11, also called LKB1) mutation was found positive in both the patient and his mother.

It is very important to conduct a thorough physical examination and to probe the family history in cases of iron deficiency anemia that is frequently encountered in children, especially in the presence of other complaints such as abdominal pain [1,2]. This allows early diagnosis of rare diseases such as Peutz-Jeghers syndrome, which leads to a high risk of developing cancer, and examination of family members for the associated complications by using advanced diagnostic tools [3,4,5].

**Keywords:** Peutz-Jeghers syndrome, Iron deficiency anemia, Bleeding

**Anahtar Sözcükler:** Peutz-Jeghers sendromu, Demir eksikliği anemisi, Kanama

**Informed Consent:** It was received.

**Conflict of Interest:** The authors of this paper have no conflicts of interest, including specific financial interests, relationships, and/or affiliations relevant to the subject matter or materials included.

## References

1. Van Lier MG, Westerman AM, Wagner A, Looman CW, Wilson JH, de Rooij FW, Lemmens VE, Kuipers EJ, Mathus-Vliegen EM, van Leerdam ME. High cancer risk and increased mortality in patients with Peutz-Jeghers syndrome. *Gut* 2011;60:141-147.
2. Beggs AD, Latchford AR, Vasen HF, Moslein G, Alonso A, Aretz S, Bertario L, Blanco I, Bülow S, Burn J, Capella G, Colas C, Friedl W, Møller P, Hes FJ, Järvinen H, Mecklin JP, Nagengast FM, Parc Y, Phillips RK, Hyer W, Ponz de Leon M, Renkonen-Sinisalo L, Sampson JR, Stormorken A, Tejpar S, Thomas HJ, Wijnen JT, Clark SK, Hodgson SV. Peutz-Jeghers syndrome: a systematic review and recommendations for management. *Gut* 2010;59:975-986.
3. Achatz MI, Porter CC, Brugières L, Druker H, Frebourg T, Foulkes WD, Kratz CP, Kuiper RP, Hansford JR, Hernandez HS, Nathanson KL, Kohlmann WK, Doros L, Onel K, Schneider KW, Scollon SR, Tabori U, Tomlinson GE, Evans DGR, Plon SE. Cancer screening recommendations and clinical management of inherited gastrointestinal cancer syndromes in childhood. *Clin Cancer Res* 2017;23:107-114.
4. Vidal I, Podevin G, Piloquet H, Le Rhun M, Frémond B, Aubert D, Leclair MD, Héloüry Y. Follow-up and surgical management of Peutz-Jeghers syndrome in children. *J Pediatr Gastroenterol Nutr* 2009;48:419-425.
5. Shah J, Sunkara T, Xiao P, Gaduputi V, Reddy M, Razia S. Peutz-Jeghers syndrome presenting as colonic intussusception: a rare entity. *Gastroenterol Res* 2018;11:150-153.