

Non-traumatic Gluteal Hematoma due to Squatting: A Rare Case

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Abstract: Gluteal hematoma is a rare condition due to the gluteus maximus muscle preventing injury to the blood vessels. These hematomas may occur due to trauma, injection, muscle intervention, bleeding disorders or drug use. As we mentioned in this case, it should not be forgotten that gluteal hematoma may occur as a result of sudden movements without trauma.

INTRODUCTION

Muscular hematomas occur as a result of extensive extravasation within the muscle. It occurs spontaneously or due to trauma. Hematomas caused by trauma are often painful and can be managed with conservative treatments¹. On the other hand, spontaneous muscle hematomas mostly occur in the abdominal region and have a high potential to turn into life-threatening conditions. It is often associated with anticoagulant treatment, especially in elderly patients².

In this case report, a patient with a rare non-traumatic gluteal hematoma will be presented.

CASE REPORT

A 50-year-old man was admitted to the general surgery outpatient clinic with a complaint of pain in the perianal area for two days. It was stated in the clinical history that her complaint started after a sudden squatting movement. There was no chronic illness, drug use, trauma or surgery in the medical history of the patient. His vital signs were fever: 36.3 oC, pulse: 82/min and blood pressure: 126/84 mmHg. The physical examination of the abdomen was normal and the rectal examination revealed an irregularly bordered ecchymosis of about 17x10 cm in the right gluteal inferomedial region (Figure 1). In abdominal magnetic resonance imaging (MRI) of the patient there is heterogeneity (hematoma?) in the subcutaneous fat tissue planes, more prominent in the inferior part of the right gluteus maximus muscle was detected (Figure 2). Oral diclofenac sodium and mucopolysaccharide polysulfate cream was prescribed to the patient, to be used twice a day each. The ecchymotic area of the patient who came to the general surgery outpatient clinic for control was 13x7 cm at the 2nd week and 8x5 cm at the 4th week, and it was observed that it completely disappeared at the 10th week.

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Figure 1. Ecchymosis in the right gluteal inferomedial area





Figure 2. Magnetic resonance imaging of heterogeneity

DISCUSSION

Gluteal hematomas can occur due to trauma, falling, intramuscular injections, anticoagulant therapy, surgery or bleeding disorders³⁻⁷. In our case, hematoma occurred after a sudden physical activity such as squatting. This is not a common cause of hematomas. Gluteus maximus hematoma is a rare condition because the structure of the muscle prevents injury to the blood vessels⁸. Imaging the effects of damage to muscles and tendons caused by direct or indirect mechanisms due to acute trauma or prolonged overuse plays an important role in the prognosis and treatment process. Usually, ultrasonography (USG) or MRI is preferred as the imaging method⁹. In the differential diagnosis of gluteal soft tissue lesions, piriformis muscle syndrome, bursitis (ischial bursitis, ileopsoas bursitis), soft tissue infectious pathologies (such as myositis, pyomyositis, fasciitis, necrotizing fasciitis), tendinitis, myocitis ossificans, heterotopic ossification can be considered. These lesions can be distinguished by MR imaging¹⁰. Unfortunately, these imaging methods can often be neglected to speed up treatment¹¹. However, the use of radiological imaging modalities is important in terms of determining the width and depth of the hematoma, as well as treatment selection and evaluation of the response to treatment. It is very important to reveal the presence of hematoma, as negative consequences such as muscle damage, acute kidney damage, neurological damage and eventually death may occur due to possible delay in diagnosis and treatment¹². In this patient, MRI was performed under emergency conditions in order to determine the size of the hematoma and its relationship with the surrounding tissues. Conservative treatment was preferred due to the fact that the patient had no history of trauma, coagulation disorders or anticoagulant use and the hematoma boundaries were clearly detected on MRI.

Apart from the factors that frequently cause gluteal hematomas, it should be kept in mind that sudden movements that cause strain on the gluteal muscles can cause hematoma in this area. In addition, the use of imaging methods will be useful in the management of the diagnosis and treatment process.

Conflicts of interest statement

The authors declare that they have no conflict of interest.

REFERENCES

1. Davis DD, Kane SM. Muscular Hematoma. StatPearls 2020, [Internet].
2. Dohan A, Darnige L, Sapoval M, Pellerin O. Spontaneous soft tissue hematomas. *Diagnostic and interventional imaging*. 2015;96:789-796. Doi: 10.1016/j.diii.2015.03.014.
3. Babu A, Gupta A, Sharma P, Ranjan P, Kumar A. Blunt traumatic superior gluteal artery pseudoaneurysm presenting as gluteal hematoma without bony injury: a rare case report. *Chinese Journal of Traumatology*. 2016;19:244-246. Doi:10.1016/j.cjtee.2015.11.018
4. Sahu KK, Mishra AK, Lal A, Davuluri V. An interesting case of gluteal haematoma. *BMJ case reports*. 2019;12:e230282. Doi:10.1136/bcr-2019-230282.
5. Apaydın E, Öztürk H. Comparison of intramuscular injections applied on ventrogluteal and dorsogluteal areas in the way of bleeding, pain and hematoma. *Gumushane University Journal of Health Science*. 2021;10:105-113. Doi: 10.37989/gumussagbil.785282.
6. Balmaseda Jr MT, Gordon C, Burke M, Michael R. An unusual presentation of gluteal hematoma during anticoagulation therapy for deep venous thrombosis in spinal cord injury. *American journal of physical medicine & rehabilitation*. 1988;67:261-263.
7. Mentş Ö, Nevruz O, Bozođlu E, Çankır Z, Özgöl Ö, Özdemir M. Pilonidal Sinus Cerrahisi Sonrası Faktör VII Eksikliği Nedeniyle Geç Dönemde Ortaya Çıkan Dev Hematom: Olgu Sunumu. *Fırat Medical Journal*. 2007;12:132-134.
8. Akbar MA, Mobassir F, Ariff M. Low Impact Injury Leading To Gluteus Maximus Hematoma In A Nonagenarian: A Symptomatic Discovery. *British Journal of Medical & Health Sciences (BJMHS)*. 2020; 2(11).
9. Durur Karakaya A, Örmeci T. Travmada kas ve tendon görüntüleme [Muscular and tendon imaging in trauma]. Hekimođlu B, editor. *Acil Travma Radyolojisi [Emergency Trauma Radiology]*. Ankara: Türkiye Klinikleri, 2019; 141-145.
10. Balcı A, Gezer NS. Kalça Eklemi Çevresi Yumuşak Dokuları. 2016-<https://turkadyolojiseminerleri.org/content/files/sayilar/13/buyuk/423-381.pdf>.
11. Gaines RJ, Randall CJ, Browne KL. Delayed presentation of compartment syndrome of the proximal lower extremity after low-energy trauma in patients taking warfarin. *American Journal of Orthopedics*. 2008;37:201-204.
12. Bostanjian D, Anthone GJ, Hamoui N, Crookes PF. (2003). Rhabdomyolysis of gluteal muscles leading to renal failure: a potentially fatal complication of surgery in the morbidly obese. *Obesity surgery*, 13 (2), 302-305. Doi: 10.1381/096089203764467261.