SPONTANEOUS INTRAMURAL HEMATOMA DUE TO WARFARIN: CASE REPORT

Case Report

WARFARİN'E BAĞLI SPONTAN İNTRAMURAL HEMATOM: OLGU SUNUMU

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ABSTRACT

Oral anticoagulant therapy should be monitored closely because of potential side effects. In this present study, we aimed to report a case of spontaneously occurred intramurral hematoma due to warfarin usage. Fifty-five years old female patient was admitted to emergency department due to abdominal pain, vomiting and skin ecchymosis. History of the patient revealed usage of Warfarin (5 mg/day) due to atrial fibrillation for one year. Abdominal tenderness and rebound was detected, especially in lower quadrant. INR level was too high to measure. Abdominal CT revealed occurrence of intramural hematoma. Vitamin K and fresh frozen plasma were applied intravenously. Patient was discharged after 6 days of hospitalization, uneventfully. There was no complication following three years.

Key words: Intramural, Hematoma, Warfarin

ÖZET

Oral antikoagulan tedavisi uygulamalarında olası yan etkileri nedeniyle yakın takip edilmelidir. Bu çalışmada, warfarin kullanımına bağlı spontan intramural hematom gelişen olgu sunumu amaçlandı. Ellibeş yaşında kadın hasta acil servise karın ağrısı, kusma ve ciltte ekimoz şikayetleri ile başvurdu. Hastanın son bir yılda atrial fibrilasyon nedeniyle warfarin 5 mg/gün kullanım öyküsü vardı. Karın muayenesinde, özellikle alt kadranlarda abdominal hassasiyet ve defans saptandı. INR seviyeleri ölçülemeyecek düzeyde yüksek bulundu. Abdominal BT'de intramural hematom saptandı. IV vitamin K ve taze donmuş plazma verildi. Hasta takip 6. gün komplikasyonsuz taburcu edildi. Üç yıllık takip süresinde komplikasyon gelişmedi.

Anahtar kelimeler: Intramural, Hematom, Warfarin

INTRODUCTION

Warfarin is commonly used both for treatment and prophylaxis. Spontaneously occurred intramural hematoma is a rare complication due to application of anticoagulant therapy and this condition comprises high risk of morbidity and mortality. Immediate diagnosis remains major obstacle due to rare presence. Laparotomy or radiological evaluation may be required for definitive diagnosis (1). In this present study, we aimed to present a case of spontaneous intramural hematoma of small bowel due to warfarin usage.

CASE REPORT

Fifty-five years old female patient was admitted to emergency department due to abdominal pain, vomiting and skin ecchymosis. Patient's medical history showed congestive heart failure, hypertension and atrial fibrillation. Patient has been taking digoxin (0.25 mg/day), propranolol (50 mg/day) for the last 5 years, and warfarin (5 mg/day) for one year. Physical examination reveals areas of ecchymosis on extremities and abdomen. Abdominal tenderness and rebound was detected, especially in lower quadrant. Laboratory data showed increased leukocyte level (15.000 per µL), anemia (Hemoglobin: 7.2gr/dL, hematocrit: 24.1%), and abnormal coagulation panel (Thrombocyte: 244.000 per µL, activated partial thromboplastin time: >180sec, prothrombin time: >180sec, INR: 8.5). Amylase, lipase and renal function tests showed no abnormality. Air fluid levels were found in plain abdominal radiograph. Abdominal ultrasound showed thickness of bowel walls, free fluid between bowel segments and signs of inflammation of omentum. Abdominal computed tomography revealed air fluid levels, increased wall thickness in ileal segments (37mm) and high suspicion of intramural hematoma (figure 1). Conservative treatment was performed and Vitamin K and fresh frozen plasma were applied intravenously. Patient was discharged after six days of hospitalization uneventfully. No complication or recurrence was detected in three years at follow-up of patient. Written informed consent was obtained from presented patient.

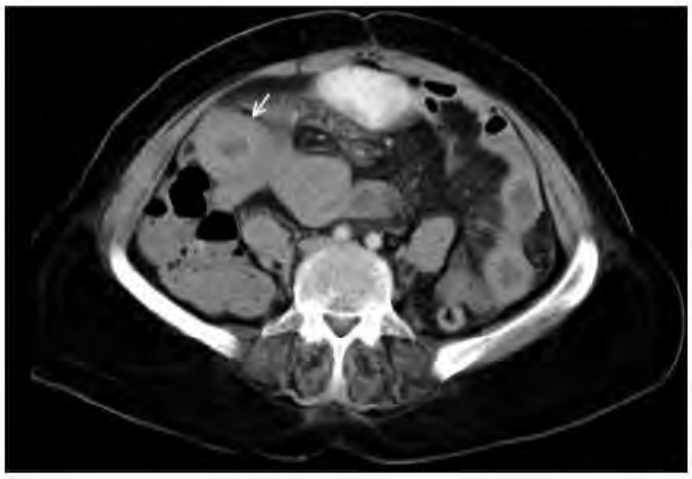

Fig1: Abdominal computed tomography view. (Arrow shows thick small bowel segment)

DISCUSSION

Warfarin is commonly applied oral anticoagulant normally used in the prevention of thrombosis and thromboembolism, the formation of blood clots in the blood vessels and their migration elsewhere in the body. Warfarin is a vitamin K antagonist, and commonly referred as blood thinner, therefore its usage could be helpful in vascular and cerebral diseases (2). New

oral anticoagulants were presented recently as an alternative to standard therapy with vitamin K antagonists. Meta-analysis showed that these new drugs are not inferior to conventional therapy, but there might be an increased incidence of myocardial infarction (3).

Prophylactic application of anticoagulant treatment can cause bleeding after overdose. Small bowel hematoma is very rare complication of anticoagulant therapy in long term usage (4, 5). This type of conditions may mimic acute abdomen, and patients are mostly admitted to emergency departments. Differential diagnosis remains major obstacle for successful treatment. Unnecessary laparotomies are major obstacle in these type clinical entities. History and physical examination reveals major pitfalls for definitive diagnosis. INR level and prothrombin time could be out of range mostly. However, it should keep in mind, even normal prothrombin and INR levels can be accompanied by intramural hematoma of intestine (6). Mild or deep anemia can be detected according to degree of bleeding, and blood transfusions may be required. In presented patient, transfusion is required because of deep anemia.

Ultrasound and abdominal computed tomography scan are highly sensitive in definitive diagnosis (7). Conservative treatment is sufficient in absence of obstruction due to increasing hematoma or ischemia. Fresh frozen plasma and Vitamin K are main drugs for treatment modality. Prothrombin time and INR must be monitored closely. In our case, even in the presence of mild obstructive symptoms, conservative treatment was the choice.

In the previous literature, surgical laparotomy, evacuation of hematoma, resection of related bowel segment and ileal by-pass were reported for diagnosis and treatment of these type diseases (8). In our current practice conservative treatment remains sufficient and effective treatment modality.

CONCLUSION

Intramural hematoma of small bowel should be kept in mind as a rare clinical entity that mimics acute abdomen, and unnecessary laparotomies should be avoided through careful evaluation.

REFERENCES

1) *Maher A. Abbas, Joseph M. Collins, Kevin W. Olden, Keith A. Kelly. Spontaneous Intramural Small-Bowel Hematoma, Clinical Presentation and Long-term Outcome. Arch Surg. 2002; 137: 306-10.*
2) *Bulent Ozgonenel, Barbara O'Malley, Priya Krishen, A.B. Eisenbrey. Warfarin reversal emerging as the major indication for fresh frozen plasma use at a tertiary care hospital. Am. J. Hematol. 2007; 82: 1091–4.*
3) *Loffredo L, Perri L, Del Ben M, Angelico F, Violi F. New oral anticoagulants for the treatment of acute venous thromboembolism: are they safer than vitamin K antagonists? A meta-analysis of the interventional trials. Intern Emerg Med. 2014 Dec 25.*
4) *Levine M, Pizon AF, Padilla-Jones A, Ruha AM. Warfarin overdose: a 25-year experience. J Med Toxicol. 2014; 10: 156-64.*
5) *Abdel Samie A, Sun R, Huber A, Höpfner W, Theilmann L. Spontaneous intramural small-bowel hematoma secondary to anticoagulant therapy: a case series. Med Klin Intensivmed Notfmed. 2013;108: 144-8.*
6) *Polat C, Dervisoğlu A, Guven H, Kaya E, Malazgirt Z, Danaci M, Ozkan K. Anticoagulant-induced intramural intestinal hematoma. Am J Emerg Med. 2003; 21: 208-11.*
7) *Secil M, Ucar G. Spontaneous duodenal hematoma. J Emerg Med. 2004; 27: 291.*
8) *Rios R, Garaulet P, Rodriquez M, Leon C, Limones M. Spontaneous intramural hematoma of the small intestine. Cir Esp. 2005; 78: 275.*

DOES KNOWLEDGE MISSING IN MICROBIOLOGY LEAD TO A CURRICULUM CHANGE?

Letter To The Editor

MİKROBİYOLOJİDEKİ BİLGİ KAYBI MÜFREDAT DEĞİŞİKLİĞİNE NEDEN OLABİLİR Mİ?

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ABSTRACT

Mostly medical students ignore basic sciences for they believe it is useless in clinical sciences. The optimum approach to curriculum planning and development may vary from institution to institution and over time at the same institution. We thought to take attention to discussion of curriculum beyond standardization. We also think this study may lead to the other medical faculties in Turkey for changing or developing the curriculum.

Key words: knowledge, microbiology, curriculum

ÖZET

Çoğu tıp fakültesi öğrencisi temel bilimlere klinik branşlarda gereksiz olacağına inandığından değer vermemektedir. Müfredat planlanması ve gelişimine optimum yaklaşım kurumdan kuruma ve kurum içinde de zaman içinde değişiklikler gösterebilmektedir. Standardizasyonun yanısıra müfredatın da tartışılmasına dikkat çekmek istedik. Bu çalışmanın ülkemizdeki diğer fakültelerde de yapılarak müfredat değişmesi veya gelişmesine yardımcı olabilir düşüncesindeyiz.

Anahtar kelimeler: bilgi, mikrobiyoloji, müfredat

The medical education in Turkey is being accreditated by UTEAK (Turkish accreditation body) also accreditated by WFME. The method of teaching still shows diversity in the medical faculties. In our university the committee system as an integrated model is applied. Since accreditated at 2014, our department of microbiology also insists of showing attention to students' feedback about curriculum and also examination questions. As mentioned in many studies, many senior undergraduate students indicate informally that their memory of basic science medical courses is less than expected, and the content of those courses did not seem relevant to their later clinical work or studies (1). Medical education is putting new knowledge above the previously learned basic knowledge; so it is a synthesis of basic and clinical science knowledge. Mostly medical students ignore basic sciences for they believe it is useless in clinical sciences. The optimum approach to curriculum planning and development may vary from institution to institution and over time at the same institution (2).

In our curriculum the microbiology lessons are placed in the last committee of second year and in the beginning of third year it is combined with infectious diseases. We wondered how successful the same students coming to third year

are in the last exam they had got in the second year. For years we observed that their knowledge retained when they come to the third year. There are studies about retention in different basic sciences and we thought to take attention to discussion of curriculum beyond standardization. We informed our students about this aim and wanted to join the study. They accepted to take the last examination of 30 questions of microbiology again in the first committee of third year. There was a period of four months since this last examination and they weren't told to study.

The result was not found statistically significant. ($p>0,05$) There were also students who got higher mark than the previous exam. There might be coincidal reasons affecting the result. We should repeat the exam not in a short time but after a semestr maybe. The questions should be applied to third and other phase students in clinics. This study may lead to the other medical faculties in Turkey for changing or developing the curriculum.

REFERENCES

1) *D' Eon MF. Knowledge loss of medical students on first year basic science courses at the University of Saskatchewan. BMC Med. Educ 2006;6:5.*
2) *Harden RM: Approaches to curriculum planning.Med Education 1986, 20:458-66.*