

Venous Thrombosis Revealing Celiac Disease: Two CasesIlyas El Kassimi^{1*}, Adil Rkiouak², Salah-Eddine Hammi³, Nawal Sahel⁴, Oumama Jamal⁵, Youssef Sekkach⁶

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Case Report***Corresponding author**

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Abstract: Celiac disease is an autoimmune enteropathy which can be unusually revealed by venous thrombosis. The association of venous thrombosis and celiac disease has been reported in almost all patients of Maghreb origin. We report two new cases of two female Moroccan patients, one admitted for thrombosis of the portal trunk with extension to the superior mesenteric vein and the other for deep vein thrombosis of the left lower limb. Etiological assay results were in favor of celiac disease. Clinical symptomatology improved significantly under anticoagulant treatment and gluten-free diet. It is necessary to think of celiac disease in the presence of unexplained thrombotic manifestations, especially in the presence of malabsorption syndrome.

Keywords: venous thrombosis, celiac disease.

INTRODUCTION

Deep vein thrombosis has been rarely reported as the revealing cause of celiac disease (CD). It is necessary to think of CD in the presence of unexplained thrombotic manifestations, especially in the presence of intestinal malabsorption syndrome. Therapeutic measures are essentially based on the gluten-free diet and the anticoagulant treatment. We report two new cases of two female Moroccan patients.

Case 1

A 51-year-old woman, admitted for management of ascites. Abdominal Doppler ultrasound showed thrombosis of the portal vein with extension to superior mesenteric vein.

The diagnosis of celiac disease was evoked in chronic diarrhea with general impairment, biological stigmas of malabsorption (hypocalcemia, hypoalbuminemia, iron deficiency anemia) and confirmed by an intestinal biopsy that showed villous atrophy with lymphoplasmocytic intraepithelial infiltration. Serology for anti-endomysium, anti-transglutaminase and anti-gliadin antibodies was positive. The symptomatology improved under anticoagulant treatment and gluten-free diet.

Case 2

A 21-year-old woman, admitted for deep vein thrombosis of the left lower limb involving left iliac and common femoral veins. At the anamnesis, the patient reported secondary amenorrhea and weight loss. Biologically, the patient had iron deficiency anemia and a spontaneously low prothrombin rate. The diagnosis of CD was confirmed by the positivity of anti-endomysium, anti-transglutaminase and anti-gliadin antibodies. The patient was treated by low molecular weight heparin associated to gluten-free diet.

DISCUSSION

Celiac disease (CD) is an autoimmune enteropathy occurring in young, genetically predisposed patient. Thromboembolic complications may occur during the course of the disease. Stroke is the most well described manifestation occurring in patient with CD [1, 2]. The association of venous thrombosis and celiac disease is reported in almost all patients of Maghreb origin; it is essentially abdominal vein thrombosis and more rarely in the lower limbs [3, 4]. The authors who reported these observations postulate that this association may be a new syndrome [3, 5].

During CD, the risk of venous thrombosis is 1.5 to 2 times higher than in the general population [6]. The "autoimmune trait" is shared by many autoimmune diseases. Many autoimmune conditions are associated with CD, part of them is known for their increased tendency to thromboembolic phenomenon [7].

In our two cases, A biological assessment in search of acquired or constitutional thrombophilia was negative (ant thrombin, S and C proteins, C-activated protein resistance, mutation V Leiden, mutation 20210 prothrombin, homocysteine and antiphospholipids antibodies).

The hypercoagulability of CD is similar to that seen in other inflammatory bowel diseases such as Crohn's disease [8]. Peripheral and central veins' thrombosis, stroke and pregnancy loss are some examples. The etiology of the hypercoagulability in CD is multifactorial. In our patients thrombophilia screening was negative; some mechanisms have been suggested in a study to explain this association: a malabsorption of vitamin K, responsible for an acquired deficit in proteins C and S; hyperhomocysteinemia secondary to folic acid or vitamin B12 deficiency; thrombocytosis by iron deficiency anemia or asplenia. The presence of antiphospholipid antibodies is rarely reported [8].

CONCLUSION

Celiac disease should be considered in the presence of unexplained thrombotic events, especially in the presence of signs of malabsorption. Therapeutic measures are based essentially on the gluten-free diet and the correction of vitamin deficiencies; thromboembolic prophylaxis or treating the predisposing factors should be considered on a personal basis.

REFERENCES

1. El Moutawakil B, Chourkani N, Sibai M, Moutaouakil F, Rafai M, Bourezgui M, Slassi I. Celiac disease and ischemic stroke. *Revue neurologique*. 2009 Nov;165(11):962-6.
2. Ludvigsson JF, West J, Card T, Appelros P. Risk of stroke in 28,000 patients with celiac disease: a nationwide cohort study in Sweden. *Journal of Stroke and Cerebrovascular Diseases*. 2012 Nov 1;21(8):860-7.
3. Zenjari T, Boruchowicz A, Desreumaux P. Association d'une maladie coeliaque et d'une thrombose porte. *Gastroenterol Clin Biol*. 1995;19:953-4.
4. Marteau P, Cadranet JF, Messing B, Gargot D, Valla D, Rambaud JC. Association of hepatic vein obstruction and coeliac disease in North African subjects. *Journal of hepatology*. 1994 Jan 1;20(5):650-3.
5. Hamdi A, Ayachi R, Saad H, Gargouri R, Zouari K, Chebbah MS. Hemiplegia revealing Budd-Chiari syndrome associated with celiac disease in an infant. *Presse medicale (Paris, France)*: 1983). 1990 May 26;19(21):1011.
6. Ludvigsson JF, Welander A, Lassila R, Ekblom A, Montgomery SM. Risk of thromboembolism in 14 000 individuals with coeliac disease. *British journal of haematology*. 2007 Oct 1;139(1):121-7.
7. Lerner A, Blank M. Hypercoagulability in celiac disease—an update. *Autoimmunity reviews*. 2014 Nov 1;13(11):1138-41.
8. Berthoux E, Fabien N, Chayvialle JA, Ninet J, Durieu I. Maladie cœliaque de l'adulte et thromboses: à propos de sept cas. Rôle des facteurs thrombophiliques. *La Revue de médecine interne*. 2011 Oct 1;32(10):600-4.