Association
des Malades
des Vaisseaux
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AMVF

Medical information 2022

Results of the Riport study
Anticoagulants in chronic portal vein thrombosis, a study by the French Network for Vascular Liver Diseases

A medical study was conducted between September 2015 and January 2020.
Its objective was to evaluate the risk of having a new thrombosis during chronic portal vein thrombosis when one does not have a strong risk factor for thrombosis identified.

I warmly thank the AMVF which participated financing this study Djalila Seghier Rezigue could be recuited to help to the patients for the study.
Doctor Aurélie Plessier
Coordinator of the reference center for vascular diseases of the liver - Beaujon.

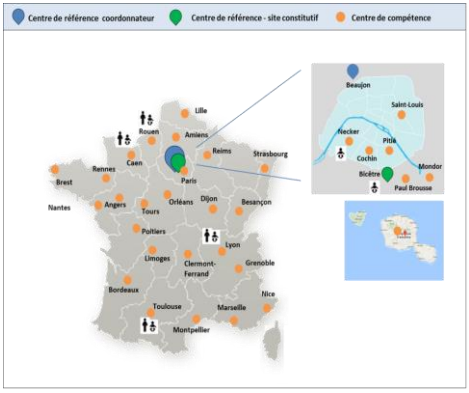
Team of the French network of vascular diseases of the liver

Portal vein thrombosis requires emergency anticoagulant treatment at the stage of recent thrombosis. An assessment of the causes of thrombosis is then performed.

In about 20% of cases, a local inflammatory, infectious or post-surgical cause is identified. In 60% of cases, an acquired or hereditary disease that favors thrombosis is identified, and in 40% of cases, a general cause, such as abdominal obesity, estrogen hormones, certain acute viral diseases (covid, CMV), and a personal or family history of venous thrombosis. Major risk factors for thrombosis include:

- myeloproliferative neoplasia;
- paroxysmal nocturnal hemoglobinuria;
- Anti-phospholipid syndrome;
- Behcet's disease;
- Homozygous or heterozygous composite mutations of the G20210A factor II or G1691A factor V genes;
- Familial antithrombin deficiency;
- first degree Personal or family history of thrombosis;
- Low risk factors such as heterozygous mutations in the G20210A factor II or G1691A factor V genes, isolated protein C or S deficiencies (without a family or personal history of thrombosis), and hyperhomocysteinemia.

It is currently recommended that long-term anticoagulant therapy be continued in patients with major risk factors. In contrast, in patients with a low risk factor for thrombosis or no risk factor, there was no evidence to determine whether or not to continue anticoagulant therapy after 6 months of treatment. The reference network for vascular diseases of the liver therefore obtained institutional funding of 450 000 euros to carry out the Riport study.



French Network for Vascular Liver Diseases

Progress of the study

We were able to start the study in September 2015, and it ended in January 2020.

Its objective was to assess the risk of having a thrombosis during chronic portal vein thrombosis when one does not have a strong risk factor for thrombosis identified with or without anticoagulant treatment. This was a randomized open-label trial, i.e., patients were randomly assigned to receive or not receive anticoagulant therapy.

Patients received either anticoagulant therapy with rivaroxaban 15 mg/daily or no anticoagulant therapy.

One hundred and eleven patients participated in the study. The majority were men (56%) with a median age of 50 years. At the start of the study, more than 70% of the patients were receiving anticoagulant treatment with antivitamin K (e.g. warfarine or fluindione). More than half of the patients had thrombosis in and outside the liver and one third had oesophageal varices. After random selection, 56 patients were treated with xarelto 15, and 55 were not receiving anticoagulant therapy (see figure 1).

Beaujon Hospital-RIPORT study team

Results (see Figure 2)

No patient treated with xarelto developed a new thrombosis. On the other hand, when patients were not treated with anticoagulants, the risk of recurrent thrombosis was 20/100 patients per year. After almost 12 months of follow-up, there were 3 phlebitis (leg vein thrombosis), 3 pulmonary embolisms and 4 digestive vein thromboses. It is important to note that those who had only a local or hormonal cause that could be treated did not have new thrombosis. The level of coagulation activity markers, called d-dimers, was measured 1 month after stopping anticoagulant treatment. It was found that when the d-dimer level was >500 ng/ml, the risk of recurrent thrombosis was increased 8-fold.

In January 2018, in view of this significant excess risk of thrombosis after stopping anticoagulant treatment, we proposed to switch all patients from the no anticoagulation group to anticoagulant. Finally, 78 patients were treated with rivaroxaban and 21 with another anticoagulant. After a median follow-up of 30.3 months, major bleeding occurred in two patients receiving rivaroxaban, and in one without anticoagulant and 57 had minor bleeds, mainly nosebleeds or heavy menstrual periods.

Conclusion

In chronic portal vein thrombosis, when the thrombotic risk seems low (after a complete check-up of the causes verified), it seems beneficial to continue anticoagulant treatment with rivaroxaban 15mg/dr. Indeed, rivaroxaban (Xarelto) for at least 2 years reduces the risk of thrombosis without increasing the risk of severe bleeding.

A very big thank you to the patients and to the AMVF for its support, to Djalila Séghier and Kamal Zekrini, to the anticoagulant clinic, to Michèle Corbic, to Onorina Bruno, for their involvement in the Riport study, to the URC Paris Nord, and to all the investigators of the French network centers who participated.

Djalila Séghier et Kamal Zekrini

Figure 2

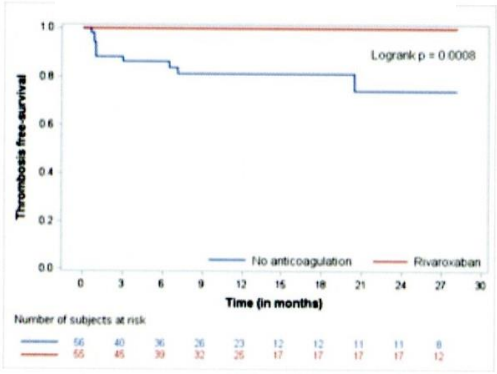


Figure 1