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STUDY REGARDING THE LOCALIZATION OF THROMBOSIS PROCESS

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Abstract
Patients undergoing surgery have an increased risk for developing venous thrombosis. The purpose of this study is to identify the localization of the thrombotic process among the 145 patients from the Emergency Clinical Hospital Oradea. Most frequently the lower limb was affected, especially the internal saphenous vein.

Key words: venous thrombosis, localization, topography

INTRODUCTION

Mechanical obstruction of the vein lumen is the main factor determining the physiological changes during venous thrombosis. Behind the barrier, the venous pressure increases and it is distending the vein. Venous dilation can cause valve incompetence behind the first obstacle. Because of the successive valve incompetence, the mechanism of protection against the effects of gravity disappears.

The degree of circulatory disorders in venous thrombosis depends on the extent and location of venous obstruction.

MATERIAL AND METHODS

The study is a retrospective one, using a total of 145 patients diagnosed with venous thrombosis, hospitalized on the surgical wards of the County Emergency Clinical Hospital Oradea.

Research period is extended to five years, in the range 01/01/2005 to 12/31/2009.

The study used the archive to the Emergency Clinical Hospital Oradea, respectively computerized database unit.

The data was obtained by evaluating the notes from the patients' observation sheets.

To determinate the exact localization of thrombotic process it was used the Eco-Doppler examination.

Representation of the results was performed using tables.

RESULTS AND DISCUSSION

Topographic evaluation of the thrombotic process indicates that the ratio between locations on the left side of the thrombus compared to the localization on the right side of the body is 1.17:1.

In 18 cases (12.41%) thrombotic process had bilateral localization.

Percentage of cases of deep thrombosis is 40%.

The most common location of thrombus was diagnosed on the internal saphenous vein (30.34%) (table 1).

Comparison of distal-proximal venous thrombosis cases shows a higher frequency of diagnosed cases of distal thrombosis (mainly in the calf) - 82.75% (120 patients).

As a result of the 2762 flebographies for 2541 patients within 10 years, Kenneth Ouriel MD et al. (2000) diagnosed 885 (34.8%) cases of venous thrombosis. The presence at the distal thrombus was more frequent than those with proximal location, so the incidence of thrombus in the calf occurred in 734 patients (83%), damage to the femoral vein and the poplitee artery was identified in 470 patients (53%) and the number of patients with damage to the iliac vein was 75 (9%). From the topographic point of view, the most common location was the peroneal vein, as described in 595 patients (67%). Report the left / right was 1.32:1 overall, but with a higher value for proximal venous thrombosis: 2.4:1 for iliac vein thrombosis compared with a ratio of 1.3:1 for infrainguinal thrombosis.

Table 1

Localization of thrombotic process

Body part	gender	Thrombosis of superficial vein				Thrombosis of profound vein					. Post-trombotic Syndrome
		Internal saphenous vein	Unspecified vein		TOTAL	Femoral vein	Popliteal vein	Unspecified vein		TOTAL	
			Lower limb	Upper limb				Lower limb	Upper limb		
r	M	8	4	-	12	8	2	-	2	12	4
	F	14	4	-	18	2	-	14	-	16	4
	T	22	8	-	30	10	2	14	2	28	8
l	M	12	10	-	22	2	4	4	-	10	4
	F	8	8	2	18	-	2	14	-	16	4
	T	22	18	2	42	2	6	18	-	26	8
r + l	M	-	-	-	6	-	-	-	-	-	-
	F	-	-	-	8	-	-	-	-	4	2
	T	-	-	-	14	-	-	-	-	4	2
TO-TAL		44	26	2	86	12	8	32	2	58	18

r – right; l – left.

The study conducted by Francisco José Muñoz and his colleagues (2008) shows low incidence of venous thrombosis localized to the upper limb. Thus, from a batch of 11 564 patients with venous thrombosis, venous thrombosis of the upper limb location was diagnosed in the case of 512 patients (4.4%). 196 patients (38%) had cancer and 228 patients (45%) had venous catheter.

The topographic location of thrombus was noted to be linked to the nature of other diseases of the patient: patients who underwent surgery more often develop venous thrombosis with distal location, and for those with a cancerous process is more frequently associated with proximal thrombosis, usually on the right side of the body.

Research conducted within the Emergency Clinical Hospital Oradea indicates a rate of 2.75% (4 patients) with localized venous thrombosis of upper limbs (including 2 with malignant processes).

Evaluation of 68 patients with clinical suspicion of deep venous thrombosis (33 patients) or at risk of thrombosis (35 patients) (Moser and Lemoine, 1991), revealed the fact that none of the 21 cases of venous thrombosis with distal location (calf) cause the occurrence of pulmonary embolism. None of these patients showed symptoms of pulmonary embolism or tomographic examination did not reveal an embolic episode. Of the 15 patients with thrombosis joint (distal and proximal), 8 had CT scan which indicated the presence of an embolic process, although only one of these patients was also symptomatic.

According to his study and his collaborators, Ghelase (2008) show that the about 25% of thrombus in the proximal lower limb deep venous system may cause pulmonary embolism.

CONCLUSIONS

Topographic evaluation of the thrombotic process indicates that the relationship between locations on the left side and on the right side of the body is 1.17:1.

12.41% (14 patients) of the thrombotic process had bilateral localization.

Percentage of cases of deep thrombosis is 40%.

The most common location of thrombus was the internal saphenous vein (30.34%). Comparison of distal-proximal vein thrombosis cases shows a higher frequency of diagnosed cases for distal thrombosis (mainly in the calf) - 82.75% (120 patients).

Topographic location of thrombus was noted that the fund is linked to pathological nature of the patient: patients who underwent surgery more often develop venous thrombosis with distal location, and for those with a

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There were 4 patients (2.75%) with localized venous thrombosis of upper limbs.

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