A SINGLE CENTRE EXPERIENCE IN DEEP VEIN THROMBOSIS: FREQUENCY OF THROMBOPHILIA, CHEMOTHERAPY AGENTS AND MALIGNANT CONDITIONS

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CONTEXT

Deep vein thrombosis (DVT) is investigated by Doppler ultrasound as the standard investigation of choice. However, clinical probability scores and experience should not be neglected when requesting this examination. Thrombophilia and the use of chemotherapeutic agents are risk factors for DVT. Malignancy (cancer) with/without treatment within 6 months or palliative is considered in the Wells' criteria for DVT, whereas active malignant conditions (solid/hematological) currently active/considered cured <1 year are considered in the Geneva score for pulmonary embolism (PE).

OBJECTIVE

To describe the characteristics/management of DVT patients admitted in a referral emergency hospital in Romania and evaluate the utility of Doppler ultrasound and clinical probability scores.

PATIENTS

We conducted a retrospective study of DVT cases diagnosed in our hospital between 01/01/2017 and 21/07/2017. Patients were identified by a database search of diagnostic codes of discharge diagnoses. Data were retrieved from medical records.

RESULTS

Two patients (moderate risk) and five patients (high risk) were diagnosed with PE. Doppler ultrasound was chosen in 95.92% of cases and computed tomography in 46.94%. D-dimer test was: positive in 10.20%, negative in 0.04%, untested in 89.76% of cases.

DVT patients	No. (%)
Study group	49 (100%)
Females	27 (55.1%)
Males	22 (44.9%)
Mean age	60.4 years
Range	29-84 years

Most common symptoms	No. (%)
Unilateral leg pain	45 (91.84%)
Pain on limb palpation	42 (85.71%)
Fever	5 (10.20%)
Substernal chest pain	5 (10.20%)

Wells clinical score for DVT probability	No. (%)
High probability	44 (89.90%)
Moderate probability	5 (10.20%)
Low probability	0 (0.00%)

B-mode ultrasound: thrombus in the popliteal vein¹; thrombus in the left common femoral vein². Color Doppler ultrasound: thrombus in the right great saphenous vein³. Computed tomography in PE^{4,5}.

Score for PE probability	Wells criteria No. (%)	Geneva revised No. (%)
High risk	0 (0.00%)	25 (55.05%)
Moderate risk	30 (61.22%)	22 (44.90%)
Low risk	19 (38.78%)	2 (0.05%)

DVT patients	No. (%)
Chemotherapy	3 (6.12%)
Thrombophilia	1 (2.04%)
Active malignant condition currently active or considered cured <1 year.	8 (16.33%)
Cancer ± treatment within 6 months or palliative.	7 (14.26%)

CONCLUSIONS

Doppler ultrasound is an effective, easy to use and non-invasive method to detect DVT, yet serial ultrasonography is generally recommended. Doppler ultrasound should be combined with clinical prediction rules for patient safety and comfort.

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