

DIAGNOSTIC VALUE OF ETHANOL GELATION TEST (EGT) AND FIBRIN-(OGEN) DEGRADATION PRODUCTS (FDP) IN SUSPECTED DEEP VEIN THROMBOSIS (DVT), CORRELATED TO THE 125-I-FIBRINOGEN UPTAKE TEST (FUT). T. Hamborg, A. Skjennald and H.C. Godal. Hem. Res. Lab., Dept. 9, Ullevål Hospital, Oslo, Norway.

The study was performed in order to investigate the correlation between EGT, respectively FDP, and a positive FUT (FUT+), confirmed by venography. Control groups: patients 1) with a negative FUT (FUT-) in spite of DVT, 2) without DVT, because a negative venography also implies FUT-. Accordingly, FUT was not accomplished in this group.

The material consisted of 41 patients with clinically suspected DVT; 20 with and 21 without DVT. Of the patients with DVT, 9 were definitely FUT+ and 11 definitely FUT-.

EGT was applied for detection of soluble fibrin, Thrombo-Wellcotest for FDP and the Chi-squared test for statistical analysis. Blood specimens were analysed 0-1 days before isotope injection in patients with DVT, or 0-2 days before a negative venography.

Conclusions: In this material, 1) Concurrently abnormal EGT and FDP was specific for the FUT+ patients. 2) On the other hand, a positive FUT could be excluded when both parameters were normal. 3) In patients with DVT, a positive EGT was found only in the FUT+ patients. (P values in the table refers to comparison with the FUT+ group).

ABNORMAL PARAM.	FUT+	FUT-	DVT-	FUT- and DVT- (P<)
EGT and FDP	4/9	0/11	0/21	0/32 (0.001)
NEITHER	0/9	7/11	17/21	24/32 (0.001)
EGT AND/OR FDP	9/9	4/11	4/21	8/32 (0.001)
EGT (± FDP)	7/9	0/11	3/21	3/32 (0.001)

DIAGNOSTIC VALUE OF ETHANOL GELATION TEST (EGT) FOR DETECTION OF EARLY DEEP VEIN THROMBOSIS (DVT) IN PATIENTS WITH STROKE. T. Hamborg, H.C. Godal. Hem. Res. Lab., Dept. 9, Ullevål Hospital, Oslo, Norway.

In the present study, EGT was applied for detection of fibrinaemia in patients with early DVT, as diagnosed by the 125-I-fibrinogen uptake test (FUT). The study included 25 patients with completed stroke and upper motor paralysis of at least one extremity. Patients who were critically ill, or with duration of symptoms for more than one week, were not included.

The isotope was injected at admission and FUT became definitely positive (FUT+) 2-12 (mean 5) days later in 17 patients (68%). In the remaining 8, FUT was negative (FUT-) for 11-14 days. FUT recordings were taken for up to 2 weeks, and EGT was analyzed thrice a week, or at least until DVT was diagnosed. The two groups were comparable in respect with age and sex distribution, mortality and frequency of serious impairment of consciousness.

Results: During the study period, EGT was positive at least once in 13 of the 17 FUT+ patients, against only 1 of the 8 FUT- patients (P<0.02). EGT was positive in 34 (37%) of totally 97 specimens from the FUT+ group, but in only 1 (2%) of 50 specimens from the FUT- group (P<0.001). In the FUT+ group, the frequency of positive EGT increased from about 10 to 70%, with a marked rise three days (day -3) before the first positive FUT (day 0).

During the period from day -11 to -4, the average frequency was 13% (3/24), while it was 46% (33/72) in the last period from day -3 to +9). This increase in correlation to the time of first positive FUT, was statistically significant (P<0.01).

Conclusion: A positive EGT in moderately ill stroke patients, necessitates further examinations in respect with DVT, as some of these may need anticoagulants to prevent serious embolic complications.

CLINICAL EVALUATION OF WAVE CONFORMATION OF PHOTOPLETISMOGRAPH AND DOPPLER IN DISTAL ANGIOPATHIES. M. Pavlovsky and S. Meschengieser. Dpto. de Trombosis. Instituto de Investigaciones Hematológicas. Academia Nacional de Medicina. Buenos Aires. Argentina.

Objective studies and interpretation of circulatory problems in hands and feet are difficult. Several non invasive techniques for vascular diseases developed in recent years may have great application in small vessels.

We have studied 280 patients with distal circulatory problems; recording (graph) the flow patterns obtained in a) distal arteries of the arm and leg with a bidirectional Doppler of 9.4 MH, and b) the skin arterioles at the tips of fingers and toes with a photopletismograph EP 100 (PP). The general patterns obtained comparing the waves at the graph recorded with the PP and Doppler were: A) a similar shape wave; B) a slight attenuation of the PP waves; C) a decrease of PP waves; D) an increase in PP waves. Patterns A and B are considered normal; Patterns C-D are abnormal.

In vasospastic disorders great modifications of PP waves could be observed, with changes from patterns C to D or viceversa with the effect of stress-temperature and drugs. Degenerative arteriopathies of big and small vessel could be distinguished evaluating the relation of the waves of both systems. Measurements of distal segmental pressures and the recovery time of pulse in fingers of toes with both systems add valuable information. We observed differences in wave types in some individuals, between Doppler and PP which are difficult to explain with our actual knowledge.

We have found that the combination of both methods is an excellent objective system for the better study and drug therapy control of different small vessel diseases.