

Study protocol of vascular risk during ESWT

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Introduction:

Physicians who frequently work with shock waves when the affected area borders arterial and venous vessels of large calibre, often neglect to assess the integrity of those vessels. The assessment should be based on eko-fluximetric exploration of the morphological structure of blood vessels, associating morphostructural investigations. It is advised to take a careful medical history and to evaluate for signs of dismetabolic cardiac and cardiovascular diseases. Fortunately literature shows that the probability and risk of hemorrhagic accident and/or thromboembolism during the course of ESWT is very low.

Methods:

The suggested protocol is based either on bibliographic review or clinical trials.

- 1) Draft and obtain signed Informed Consent.
- 2) Conduct careful anamnestic research of pre-existing pathological conditions and/or risk factors for vascular disease.
- 3) Stay apprised of cultural and technical updates, recognizing and applying "innovative technologies."

Results:

The research conducted led to identification of local and general conditions of increased risk, as follows:

- A) Presence of atheromatic and calcific, parietal and intraluminal plaque
- B) Presence of endoluminal thrombus (whether arterial or venous)
- C) Presence of neoplastic and/or degenerative stenosis of vessels
- D) Presence of stenosis and/or vascular degeneration, particularly when present with liver disease, dismetabolic diseases, hypertension or use of estro-progestinic drugs
- E) Tobacco, drug and/or alcohol abuse
- F) "Age" of vascular structures involved
- G) Gender
- H) History of previous limb fracture complicated by thrombo-embolic accidents, or peripheral edema
- I) Recent immobilization
- J) Lifestyle with eating disorder (obesity, alcoholism) and/or use of tobacco and drugs

Conclusion:

Based on the results obtained by adhering to the protocol, in terms of protection both for the operator and for the patient, we recommend the use of our protocol for practitioners of ESWT.