Publication Brief

[Frequency of thrombosis in hemodialysis arteriovenous fistulas. Contribution of 2 surveillance methods: Doppler and dilution ultrasound techniques].

Branger B, Groupe hospitalo-universitaire Carémeau, CHU Carémeau, Nîmes, France

Article in French

BACKGROUND
A correct access flow is one of the most important factors for dialysis efficiency. Clinical examination does not allow the detection of flow decrease.

OBJECTIVE
To compare the value of Qa surveillance using Duplex (Doppler) ultrasound and ultrasound dilution technologies.

STUDY
Prospective two-year study comparing the dilution ultrasound system (Transonic) to duplex Doppler sonography (GE logiq 700 expert series). The study had two phases:
1. Comparison of the access flow values obtained with both devices and discussion of their discrepancies;
2. Scheduled survey of vascular access, analysis of its results regarding the rate of fistula thrombosis; followed by definition and achievement of a strategy of early preventive surgery.

RESULTS
• After two years, flow data were similar with both systems when Transonic values were corrected by a constant coefficient.
• The use of both techniques during the scheduled survey of fistulas resulted in a 43% decrease of the rate of acute thrombosis (p < 0.05).

Reference