

Vasc-Alert as defined in 2006 K/DOQI Update on Vascular Access:

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Indirect methods for determining P_{IA} . Most

HD systems can store the blood pump values associated with DVP. A computerized algorithm has been developed that uses an empirical formula to calculate an equivalent P_{IA} from the DVP made during treatment. During a given treatment, many measurements at different flows can be made along with the simultaneous MAP, and an average equivalent P_{IA}/MAP can be calculated.

The average values can be trended with each treatment and examined for an upward trend. When the ratio exceeds 0.55, the access has a greater risk for clotting.³²⁶ This technique has been commercialized, providing monthly reports and trend analysis. Its ability to predict thrombosis is equal to that of direct measurement of P_{IA} . In the evolution of the IAP ratio to detect stenosis, the discriminator value has progressively increased from 0.4 using the ratio of systolic pressures, 0.45 using the ratio of mean pressures measured directly, 0.5 using transducers on the machine, and finally 0.55 when deriving P_{IA} from the dynamic pressure. (-Note Vasc-Alert provides reports weekly)