

- **Pressione arteriosa sistolica (120 mmHg)**

È il valore pressorio più alto raggiunto nelle grosse arterie durante la sistole ventricolare

- **Pressione arteriosa diastolica (80**

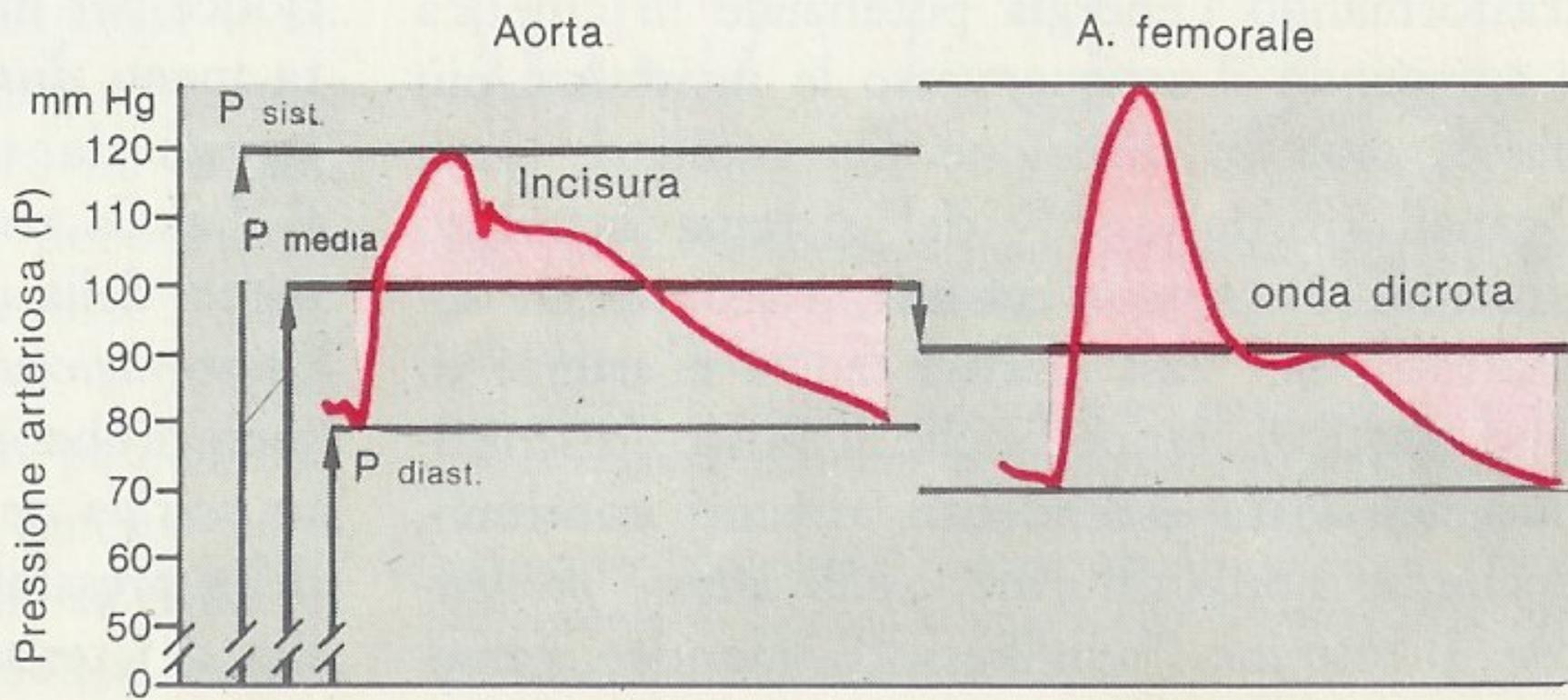
mmHg) È il valore pressorio più basso raggiunto nelle grosse arterie durante la diastole ventricolare

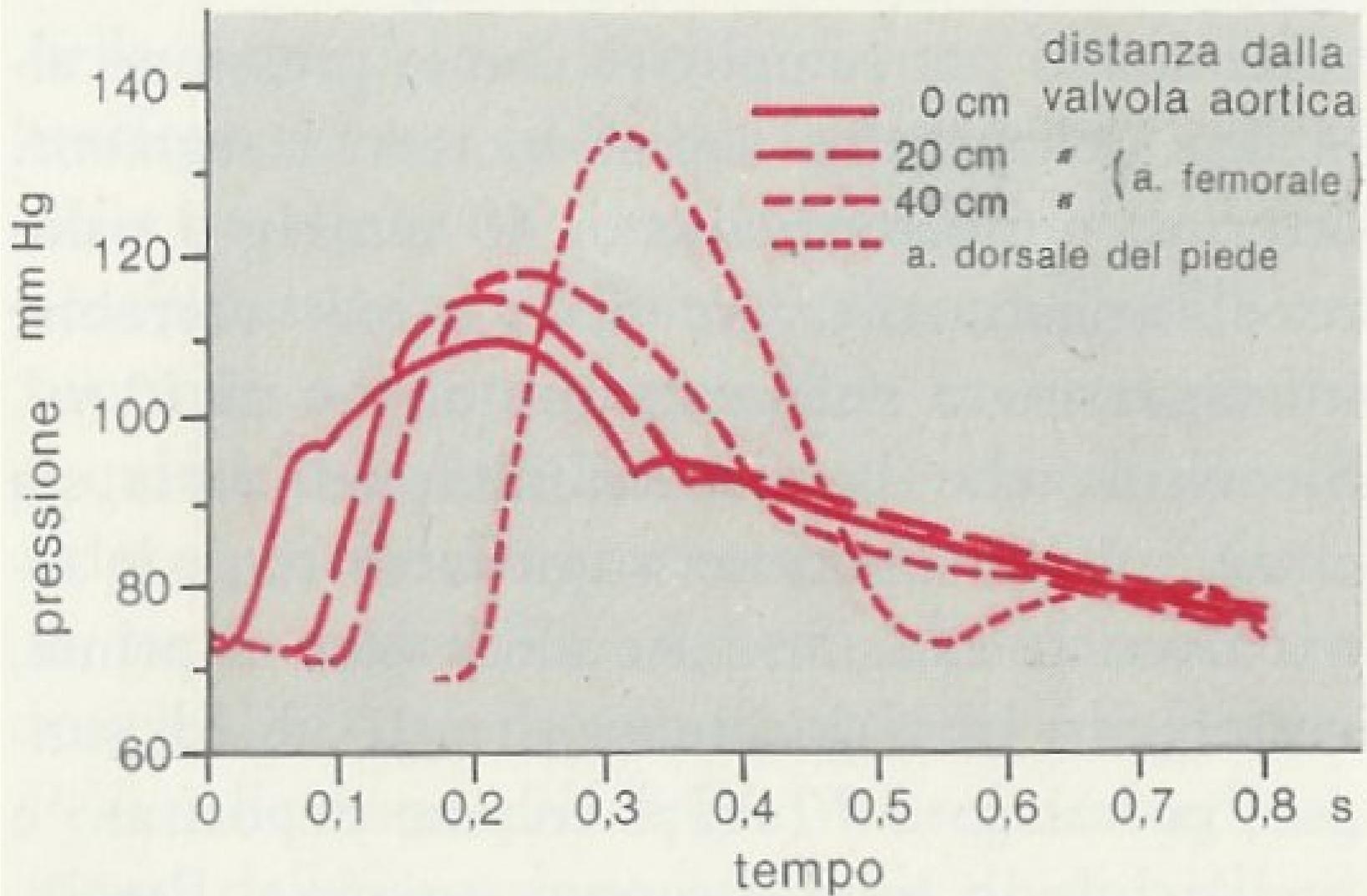
- **Pressione differenziale o di polso (40**

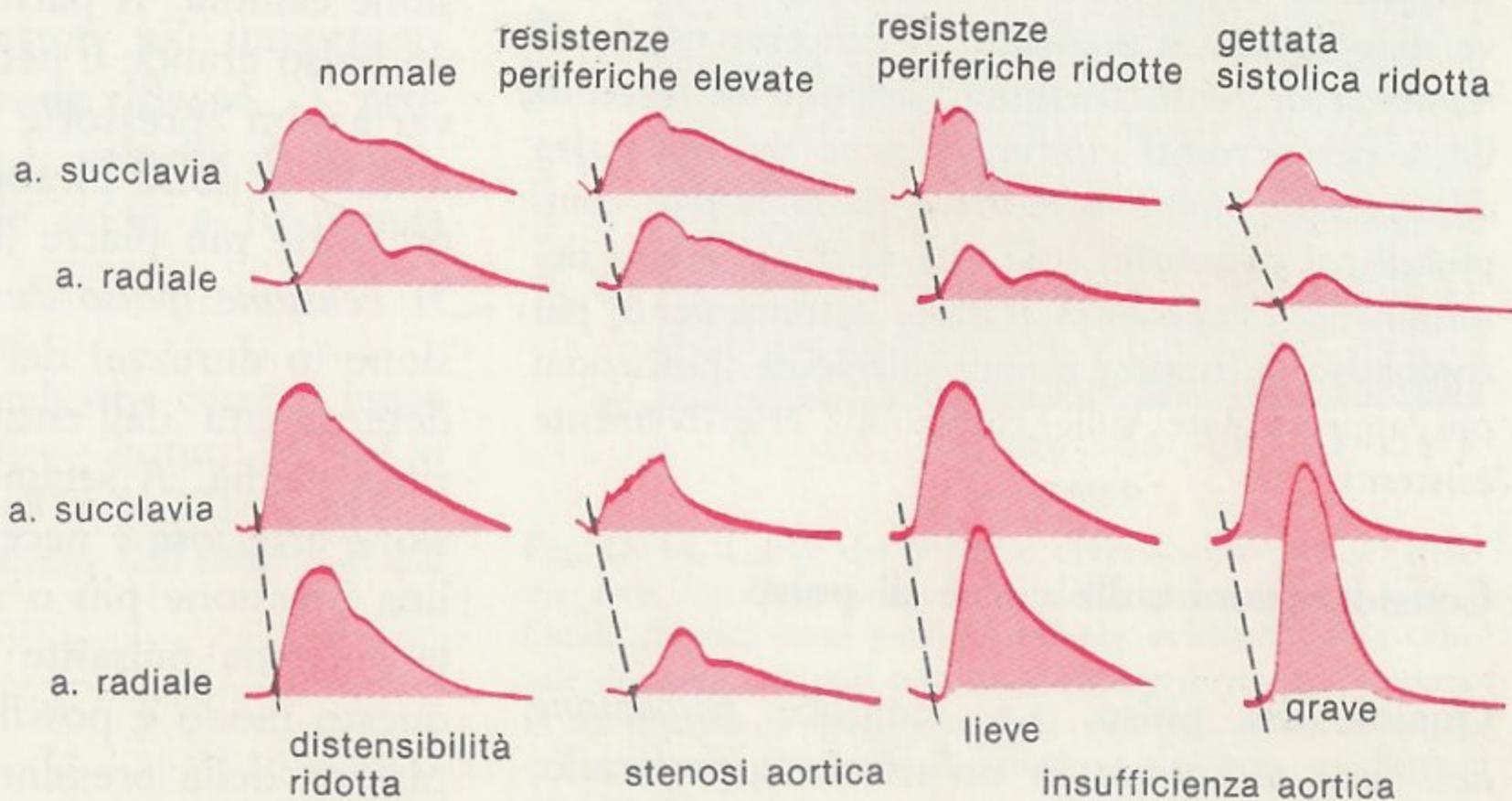
mmHg) È la differenza tra P_{as} e P_{Ad}

- **Pressione arteriosa media (100 mmHg)**

Può essere calcolata empiricamente mediante la formula: $P_{am} = P_{Ad} + 1/3(P_{as} - P_{Ad})$







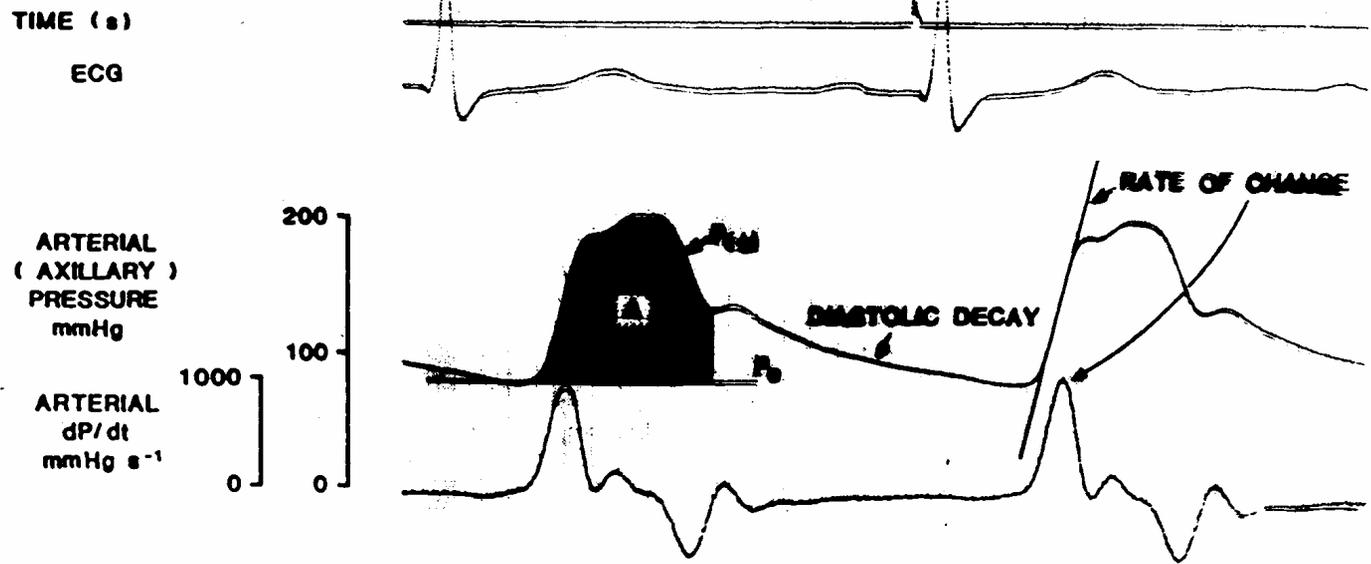
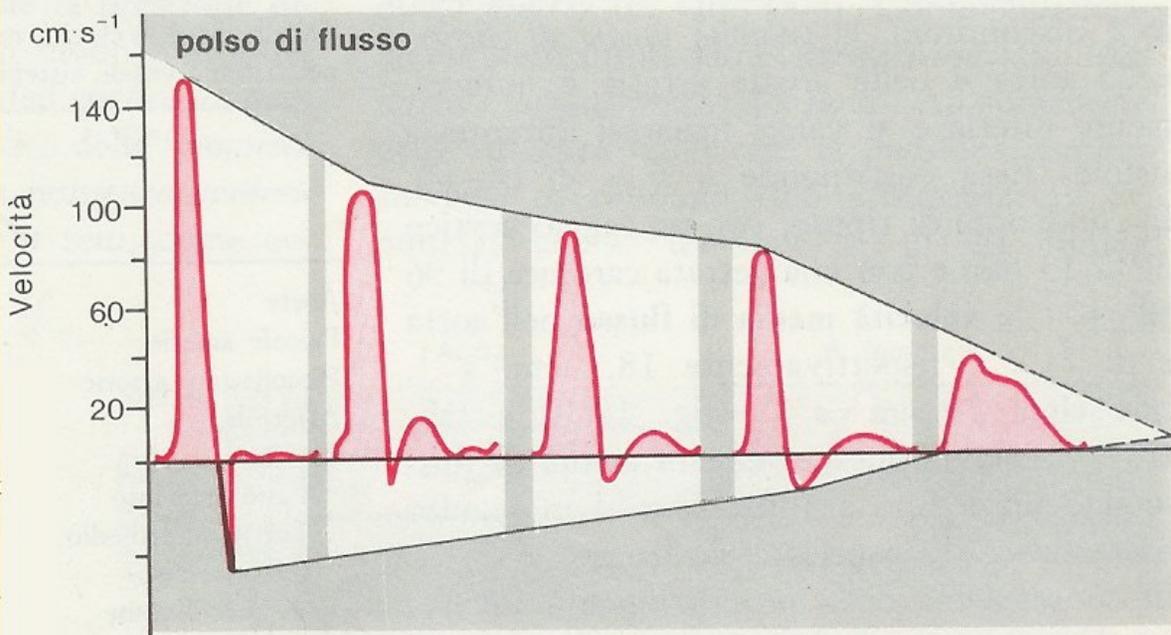
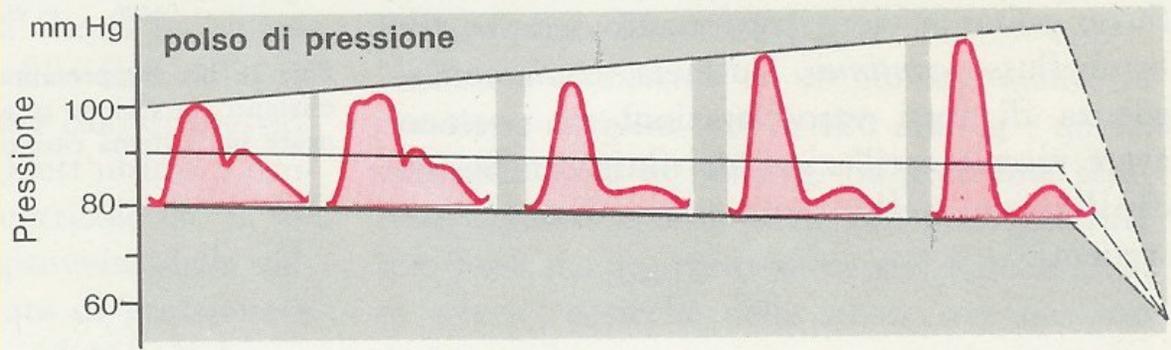


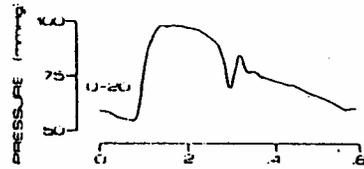
Fig. 1. Three secondary variables derived from the central arterial pressure waveform:
 1. dP/dt – the rate of change of arterial pressure at the onset of systolic ejection.
 2. stroke volume – related to the area (A) beneath the systolic ejection portion of the curve.
 3. systemic vascular resistance derived from the decay of arterial pressure during diastole. From⁽²⁹⁾ by courtesy of the Editor of the British Journal of Anaesthesia



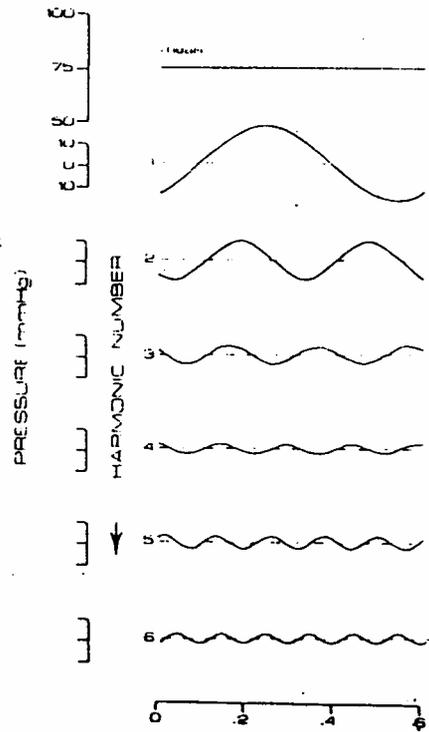
| | | | | |
|------------|----------|------------|----------|--------|
| Aorta | | | Arteria | |
| ascendente | toracica | addominale | femorale | safena |

FOURIER SERIES

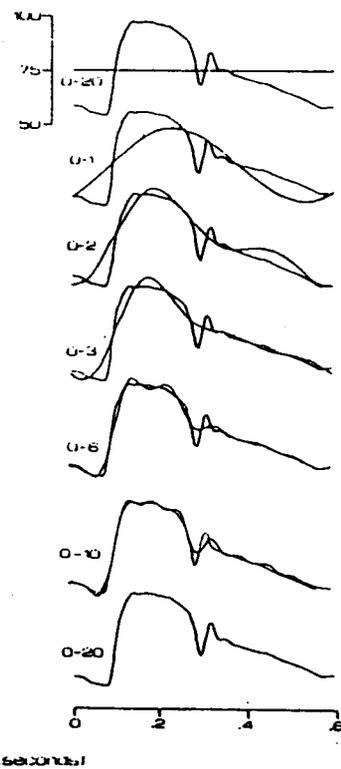
ORIGINAL



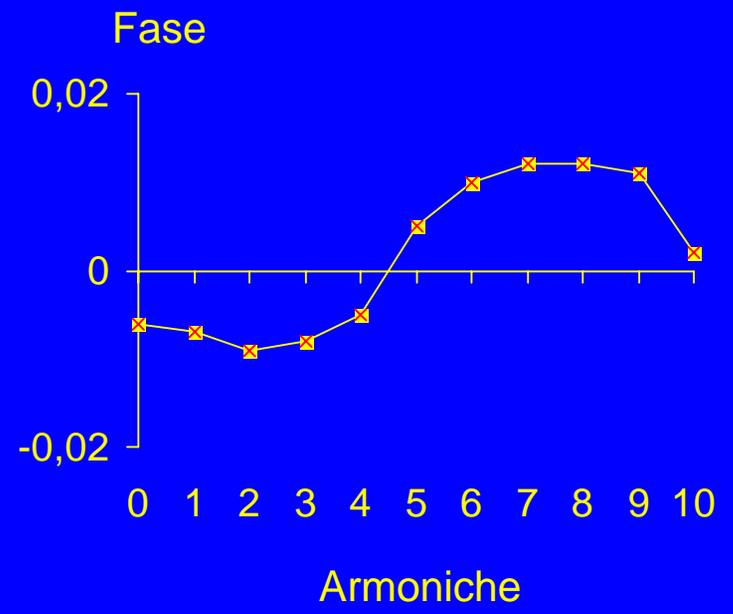
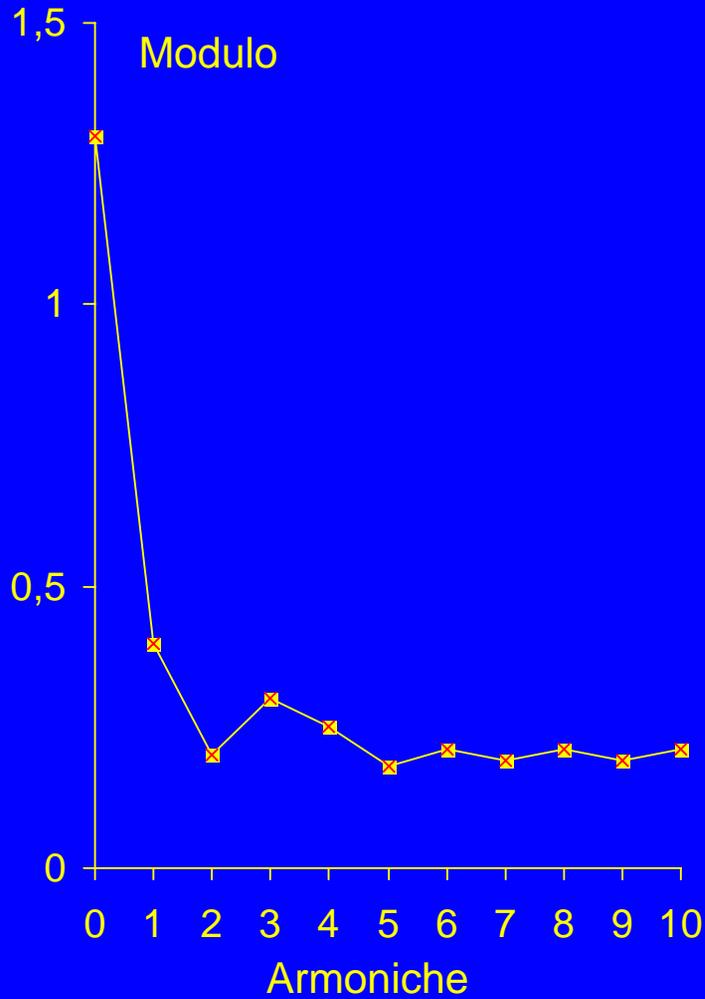
ANALYSIS

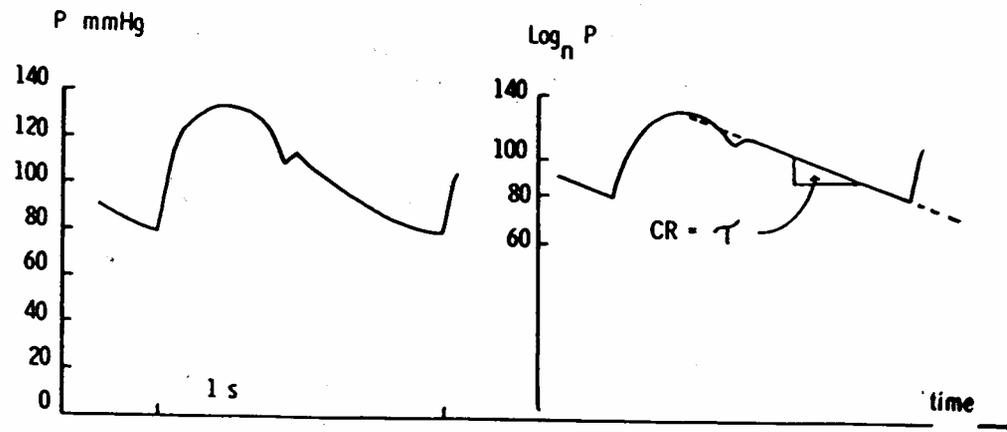


RECONSTRUCTION



TIME (seconds)





$$Z_c = R + \frac{1}{i\omega C}$$

Fig. 2. Derivation of the time constant τ of the diastolic pressure decay, from the logarithm transform of the arterial pressure. C , capacitance; R , resistance

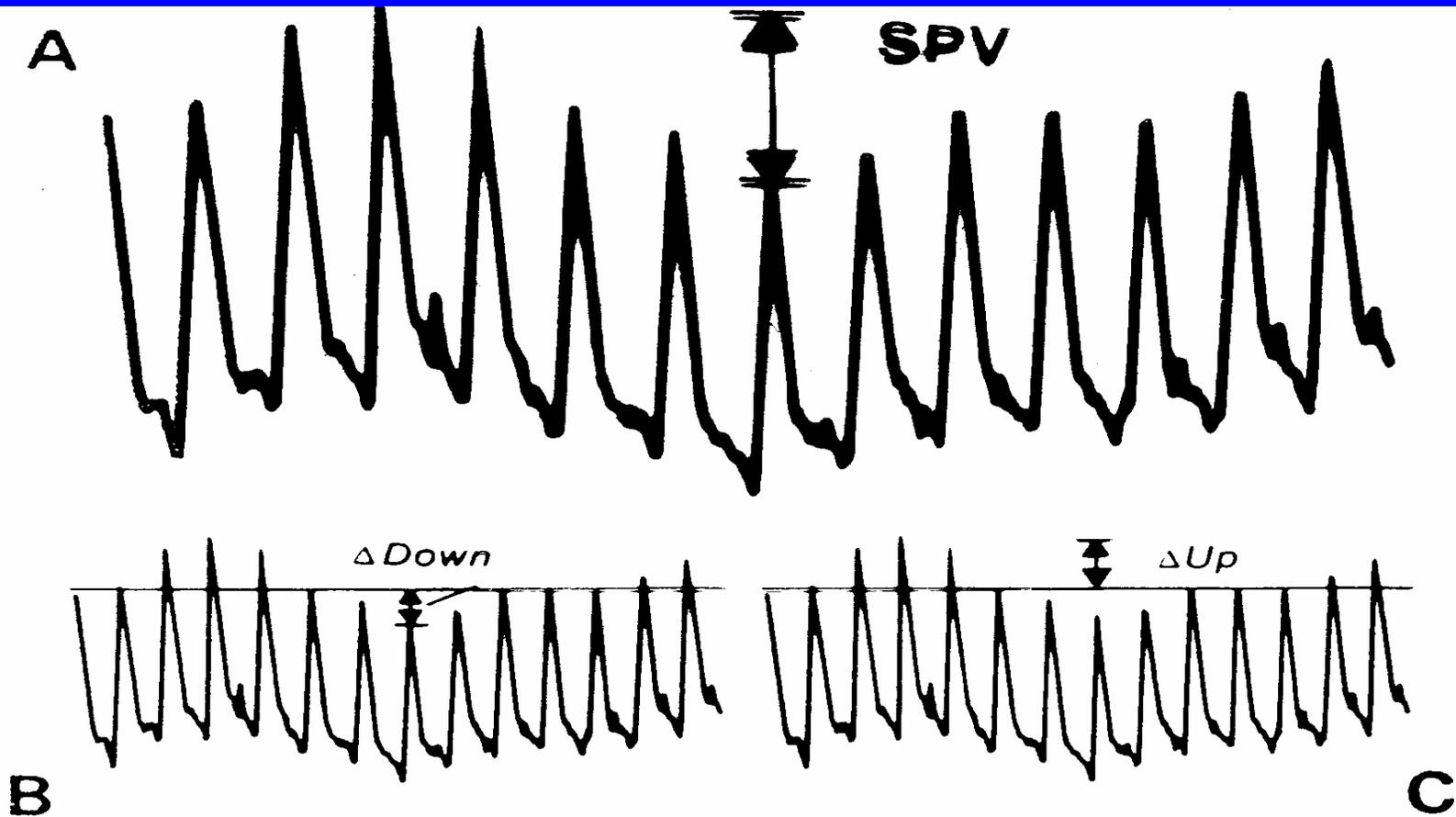


FIG. 21-2. A. The systolic pressure variation (SPV) is the difference between the maximal and minimal systolic blood pressure during one ventilatory cycle. The sum of Δ down (B) and Δ up (C) constitute the SPV. The horizontal reference line indicates systolic blood pressure during end-expiration. (Reproduced with permission from Perel A, Segal E, Pizov R: Assessment of cardiovascular function by pressure waveform analysis. In Vincent JL [ed]: *Update in Intensive Care and Emergency Medicine*, p 542. New York, Springer-Verlag, 1989)