

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

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

- **Pressione arteriosa diastolica (80**

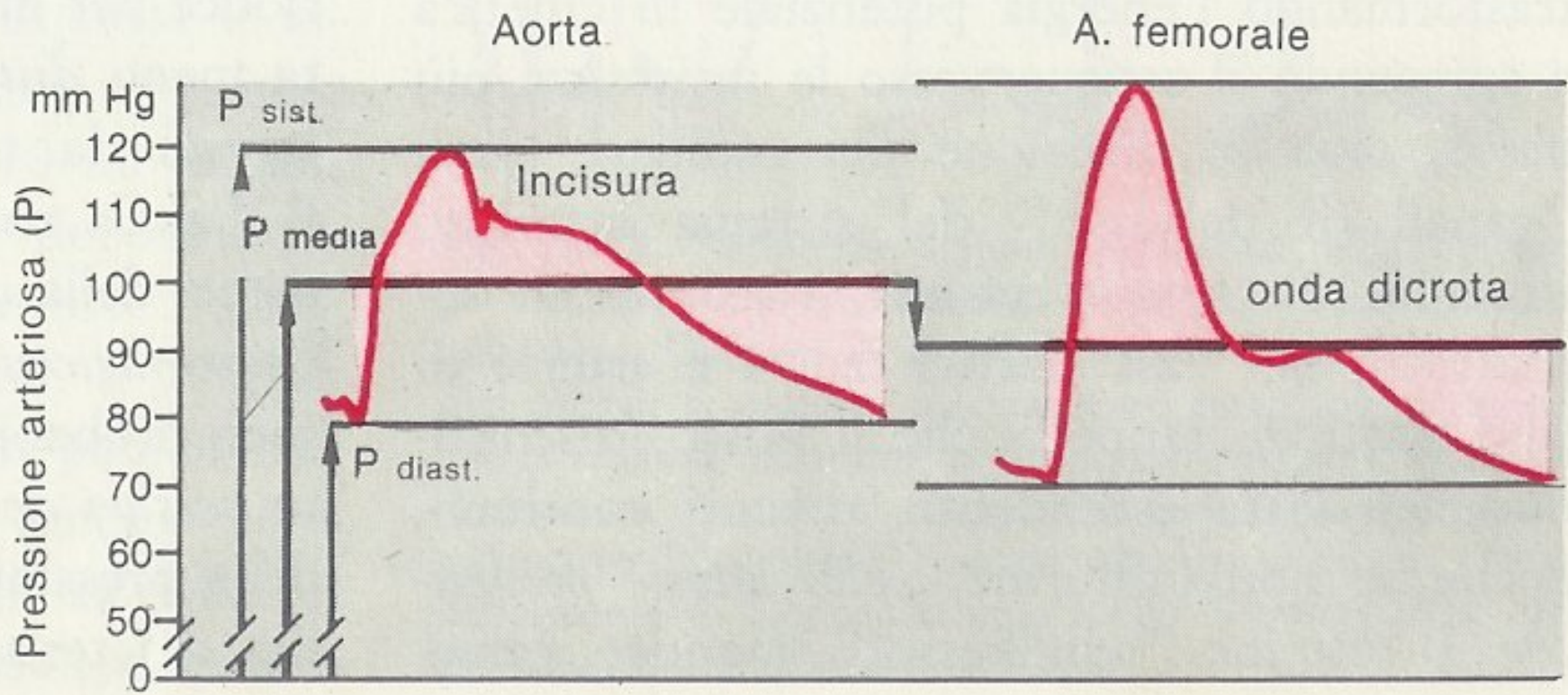
**mmHg)** È il valore pressorio più basso raggiunto nelle grosse arterie durante la diastole ventricolare

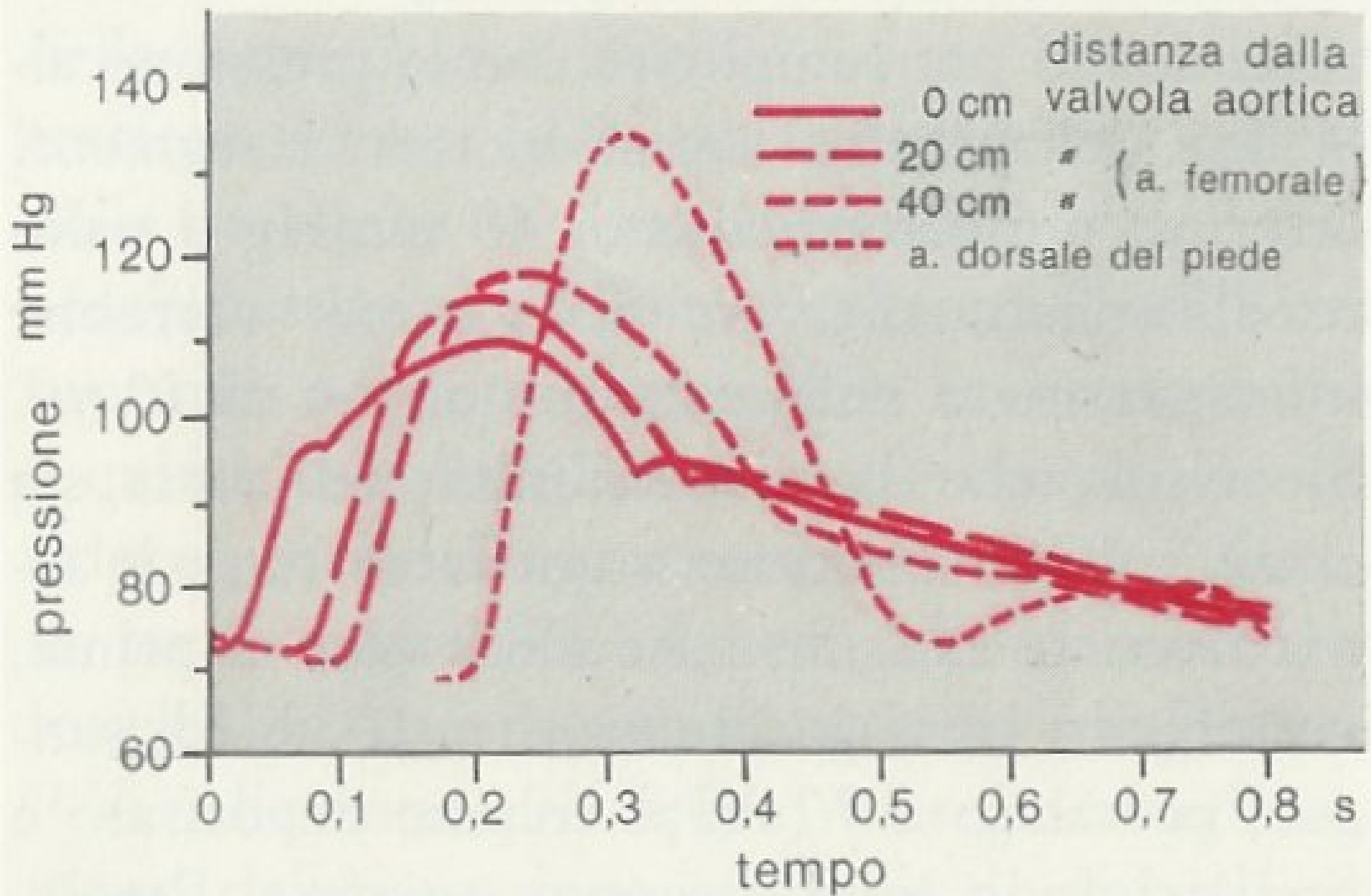
- **Pressione differenziale o di polso (40**

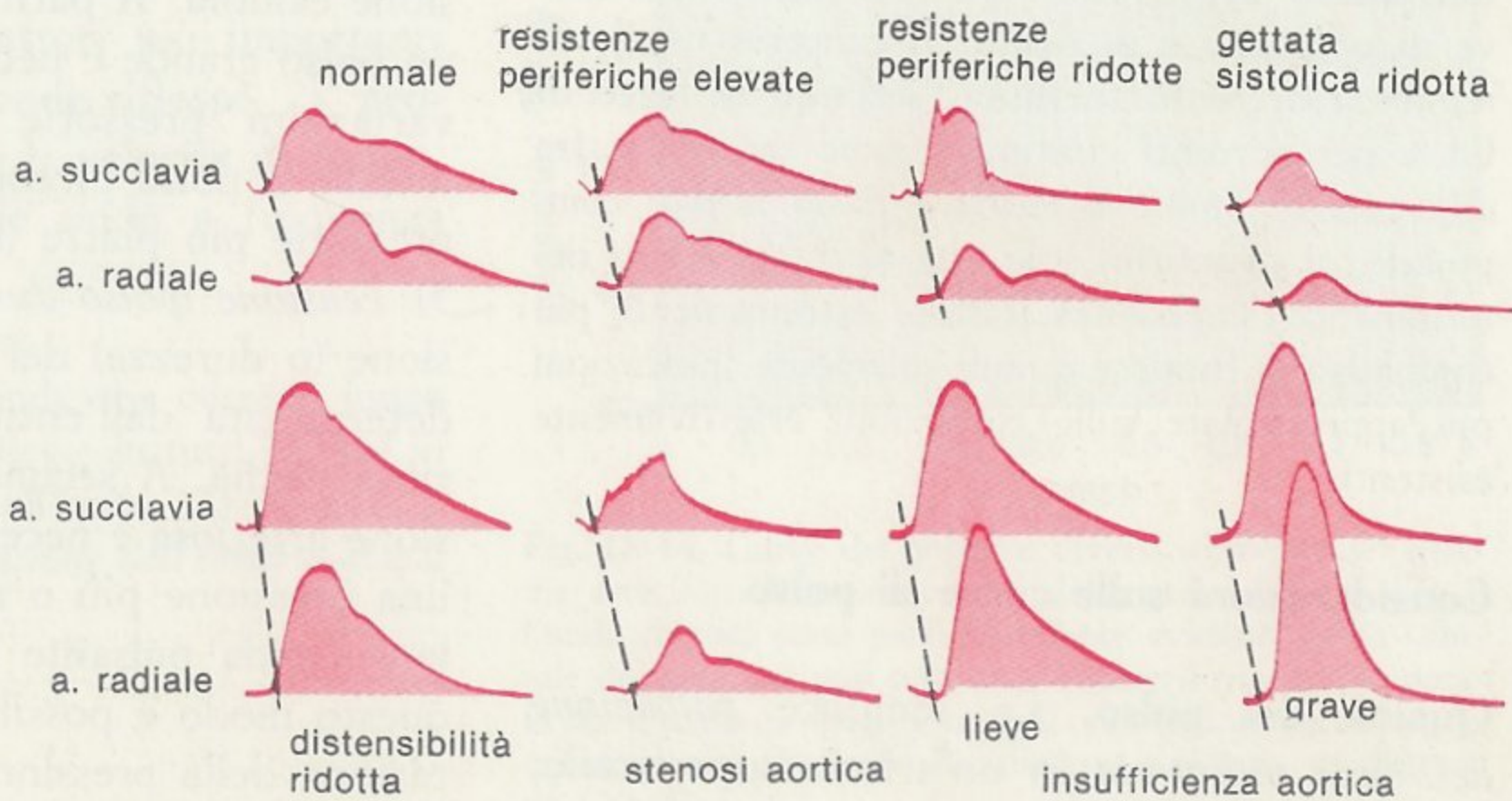
**mmHg)** È la differenza tra  $P_{as}$  e  $P_{Ad}$

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

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







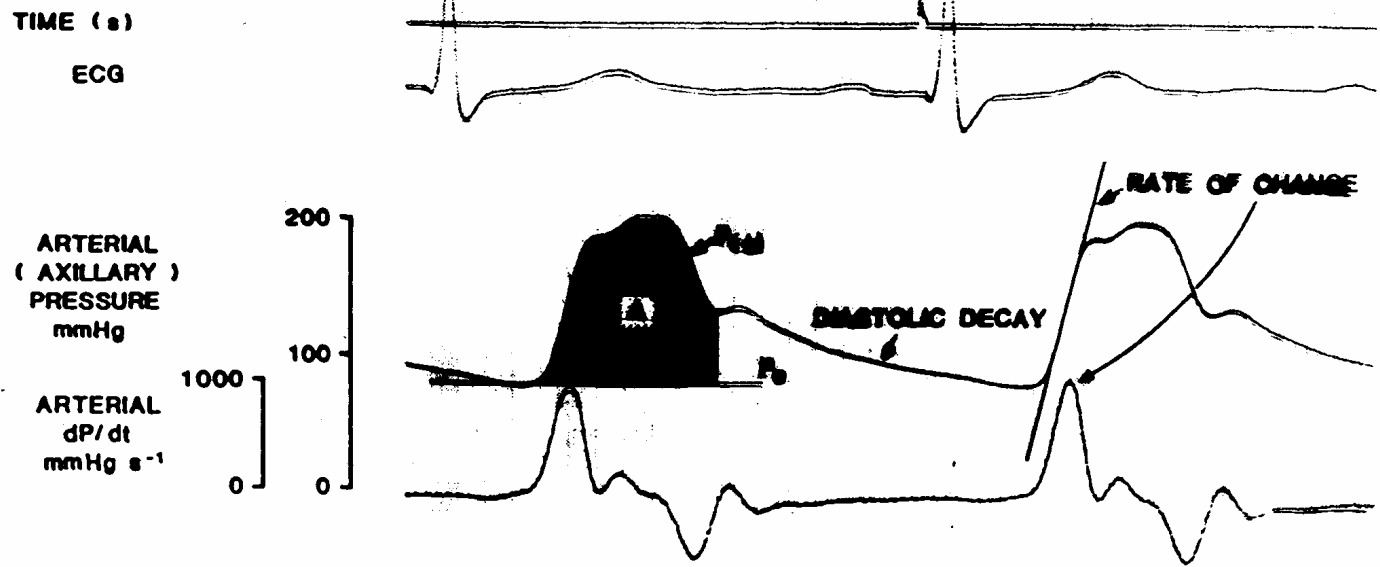
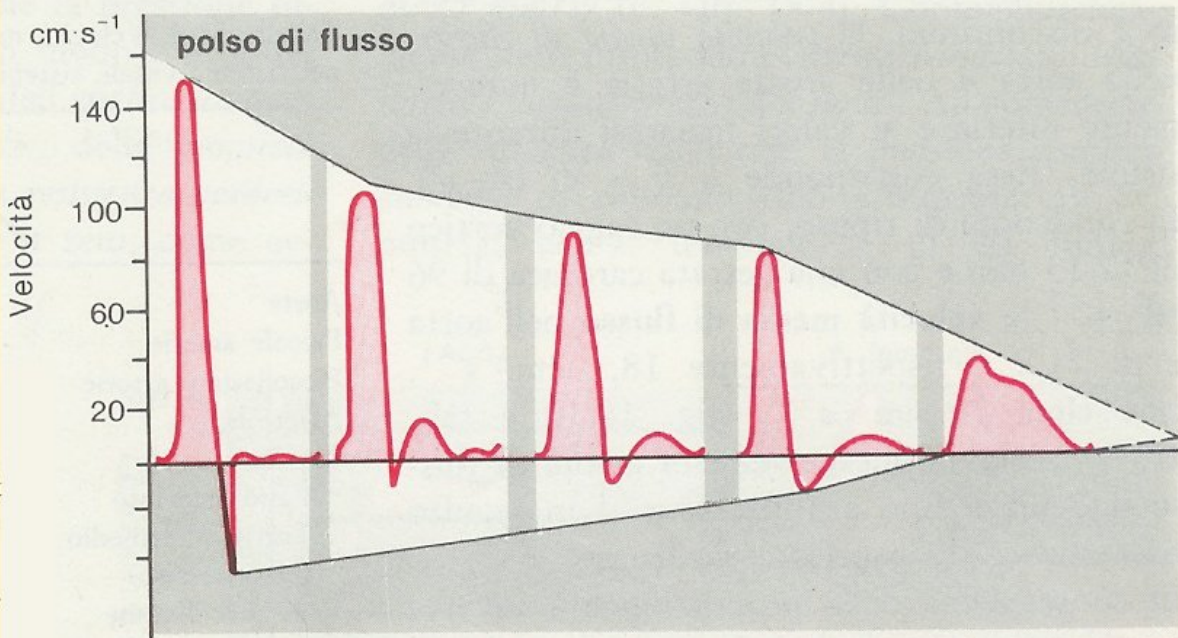
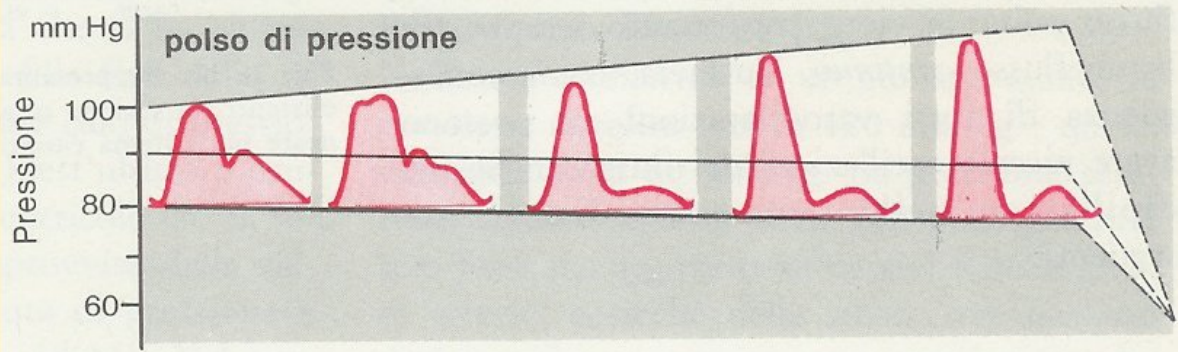


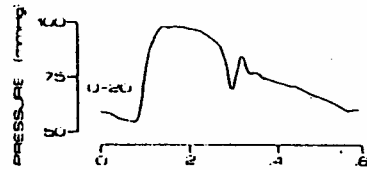
Fig. 1. Three secondary variables derived from the central arterial pressure waveform:  
 1.  $dP/dt$  – the rate of change of arterial pressure at the onset of systolic ejection.  
 2. stroke volume – related to the area (*A*) beneath the systolic ejection portion of the curve.  
 3. systemic vascular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



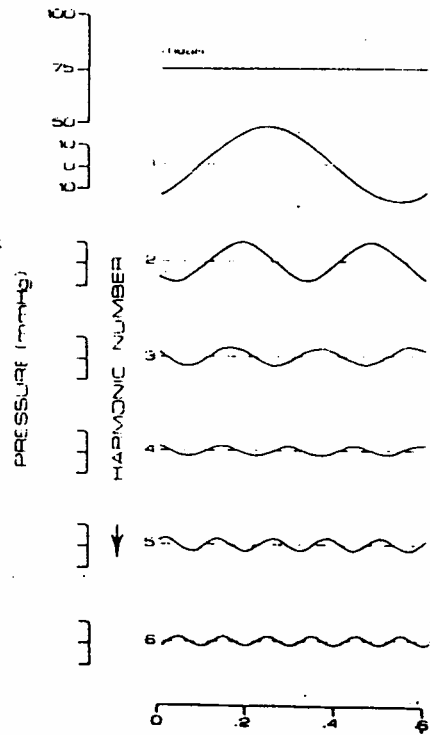
Aorta			Arteria	
ascendente	toracica	addominale	femorale	safena

# FOURIER SERIES

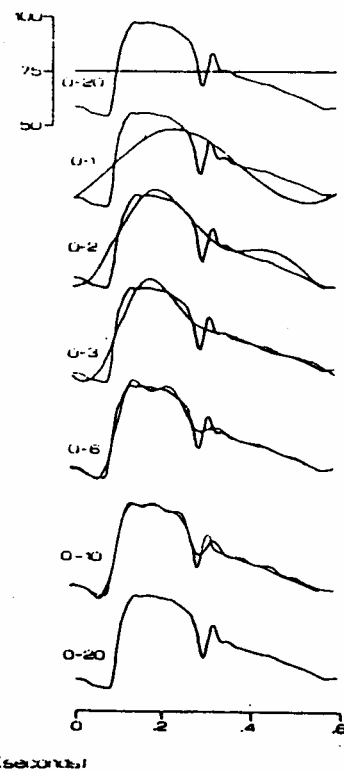
ORIGINAL



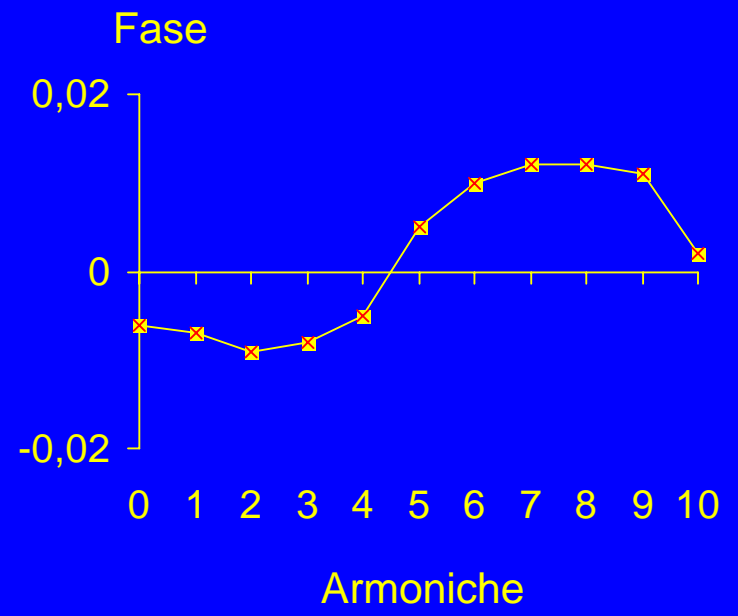
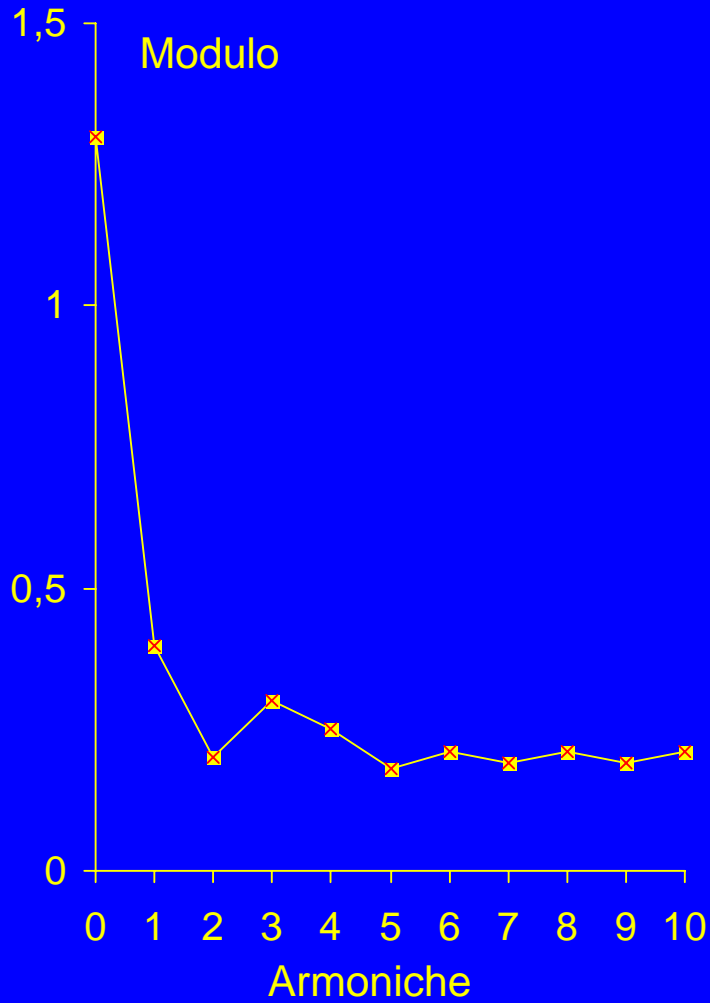
ANALYSIS



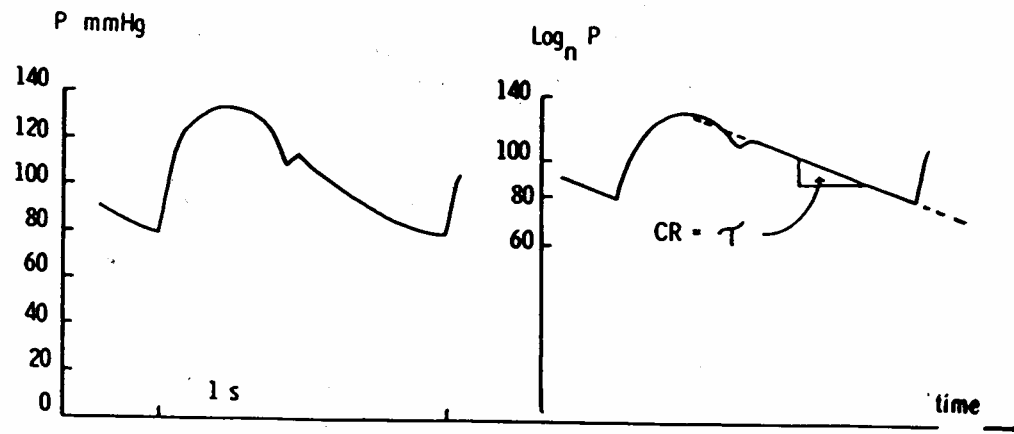
RECONSTRUCTION



TIME (seconds)







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

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

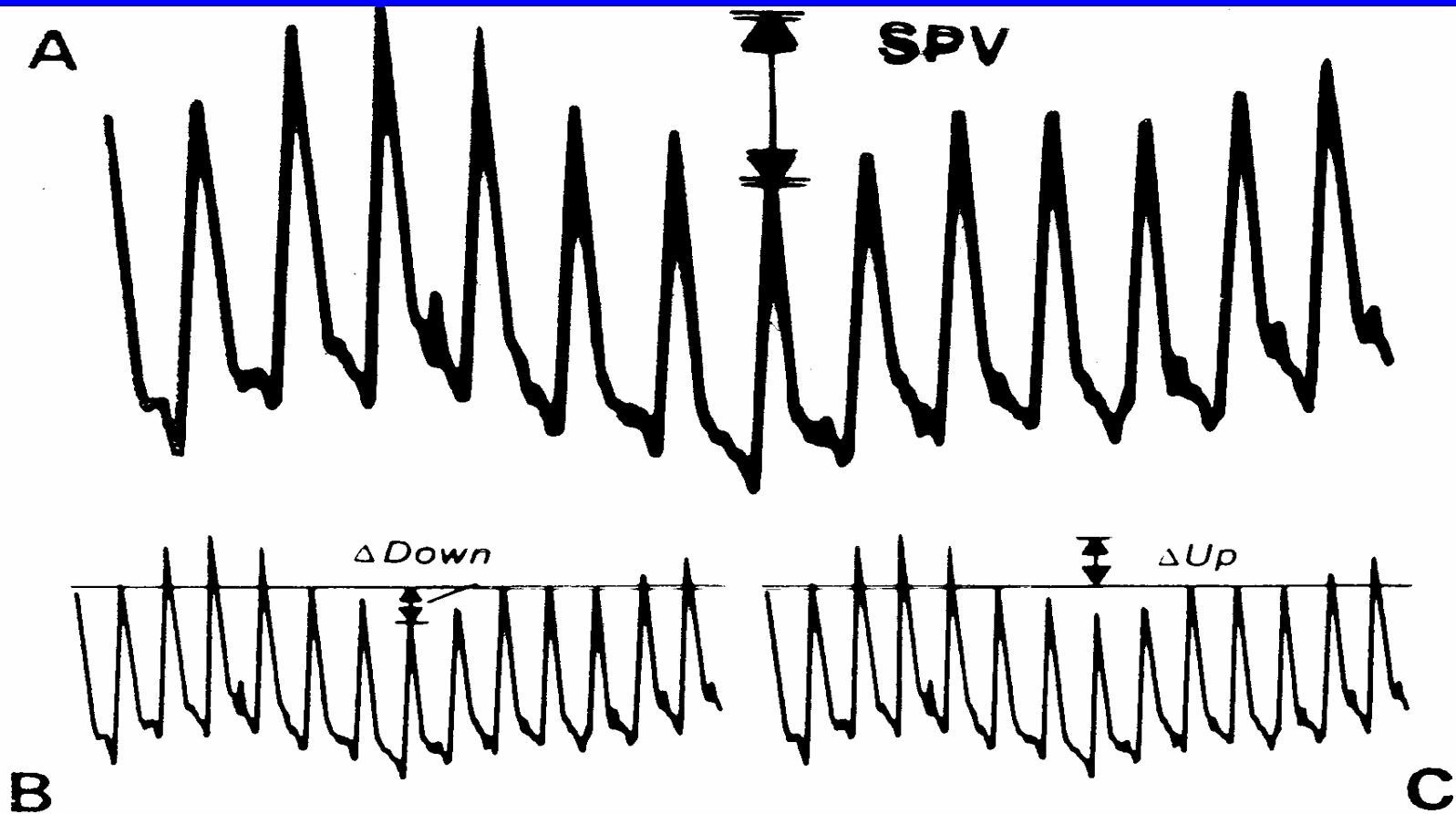


FIG. 21-2. A. The systolic pressure variation (SPV) is the difference between the maximal and minimal systolic blood pressure during one ventilatory cycle. The sum of  $\Delta$  down (B) and  $\Delta$  up (C) constitute the SPV. The horizontal reference line indicates systolic blood pressure during end-expiration. (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)