

Measurement of plasma catecholamine concentrations. An assessment of anxiety

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<http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/32291>

Date: 1985

Abstract:

This study was designed to assess the value of measurement of plasma catecholamine concentrations as an objective index of anxiety. A preliminary study was undertaken on 11 healthy volunteers (medically qualified), to determine if venous cannulation per se produced any change in plasma catecholamine concentrations. There were no changes in plasma catecholamine concentrations in the 2 h following insertion of an i.v. cannula, suggesting that venous cannulation did not induce a measurable stress response. A second study was performed on 48 surgical patients who were asked to rate their perceived anxiety on a linear analogue scale immediately before premedication and immediately before induction of anaesthesia. Venous blood was obtained at the same time as these ratings. There were no significant changes in perceived anxiety or plasma noradrenaline concentrations following premedication. However, compared with values before premedication, there was a mean percentage increase in plasma adrenaline concentration of 40% before induction of anaesthesia. A significant correlation was shown between mean percentage change in Linear Analogue Anxiety Score and mean percentage change in plasma adrenaline concentrations ($r = 0.32$).

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