

Abstract

There are conflicting reports of the effect of nitrous oxide on the oxyhaemoglobin dissociation curve. We have therefore determined P50 of haemoglobin in the presence of either nitrous oxide or nitrogen and studied the upper portion of the curve in greater detail. No significant differences in the oxyhaemoglobin dissociation curve were observed when nitrous oxide was substituted for nitrogen. The oxygen tensions measured in gas mixtures were not significantly different when determined simultaneously with a polarographic oxygen electrode and the mass spectrometer when nitrous oxide was used instead of nitrogen.