

The shape of indicator dilution curves used for cardiac output measurement in man

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In six patients arterial plasma lithium concentration-time curves were recorded following injection of lithium chloride into the right or left atrium. 2. Lognormal curve fitting was used to derive the areas under the first pass dilution curves. 3. Subjecting the curves produced by left atrial injection to a delay and sequential filtering produced curves that closely approximated those produced by right atrial injection. 4. We conclude that the transfer function of the right heart and lungs is equivalent to a delay and sequential filtering, that the primary indicator dilution curve is closely approximated by a lognormal curve and that loss of lithium in the lungs following right atrial injection is clinically insignificant.