Richard Muirhead's Downloads

I have included this page so that readers may be able to view my poster at their leisure, to be able to read some of the references. I have copied those I found free on the internet; some, such as Janmahasation, are only available at a substantial price. All documents are presented as PDF format for portability.

RM_poster.pdf – The poster itself.
Hume1966.pdf – Hume's 1966 paper
Hume1971.pdf – Hume & Weyers' 1971 paper.
Han.pdf   - Han's paper discussing the Janmahasation equations
DEXA.pdf   - Dodevic & Stratsova's paper comparing DEXA with Hume 1966
                      equation.

There are also some programs featured in the paper. With the exception of Steven Shafer's excellent STANPUMP which runs under MSDOS (and Windows in simulation mode) the programs were written by myself using Delphi2 and so should run under most 32-bit versions of Windows. The programs were developed on a Windows XP SP3 platform but run successfully on my ancient Toshiba Libretto (Windows 95B, Pentium 120, 32MB memory) and a Windows 7 laptop. I have not tested them on other versions of Windows but should run OK if using the 'Windows 95 compatibility mode'.

TCIsim.exe was the program used for the 'plasma concentration after one-hour infusion' plots. To run the program enter the subject's height, age and weight. The infusion rate is pre-set for remifentanil (0.1mcg/kg/min) and propofol (0.2mg/kg/hr) but may be changed as required. The model used can be selected by pressing the appropriate button until that desired is displayed on the label ('new propofol' is a development model, please ignore). Similarly the gender is displayed on another button and toggles between 'male' & 'female'. Hit 'compute' and one hour of data will appear in the box. This can be viewed, saved as a CSV or use copy/paste.

Proptrak.exe is a program to estimate the plasma and effect concentration of propofol in real time using the Schnider model but with James, Hume & Weyers (1971) and Janmahasatian lean body mass equations. Brief operating instructions are included.

 Remitrak.exe is a similar program for remifentanil using the Minto model. There is a help file in PDF format (trakhelp.pdf) for both programs. Both tracker programs and the help file are contained in tracker.zip.

All the above programs are offered 'as is' and, although I have tried to make them as accurate as possible, I cannot guarantee their accuracy. The last two programs should only be used by anaesthetists familiar with total intravenous anaesthesia.

If there are any problems with the above please email me at
rmuirhead@compuserve.com and I will do my best to rectify things!

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