DESCRIPTION AND EXAMPLES OF OPERATION OF THE UROMAC Vvoid SOFTWARE

Vvoid. In Uromac versions 3.5.4 to 3.6.8 the voided flow waveform is continuously integrated by software.   There is access to two 'controls' to 'customise this for optimising analysis of the occasional patient flow trace which presents problems. These controls are accessed from a dialogue box opened from the relevant (Vvoid) channel control menu. This is accessed at the extreme right of the screen where the channel function is labeled. To the right of the channel label is an inverted white arrow head. Click and hold the button down and navigate down to the voided volume item and select it. Your will see the following dialogue window open:


Note that the flow amplitude Trigger is normally set to 0 or 1 ml sec^{-1}. Once the flow exceeds this threshold the flow data is software integrated to give Vvoid. The post acquisition time is set normally to 5 or 10 seconds. If set to 5 seconds it means that if flow stops and restarts within 5 seconds the volume will show a continuous cumulative pattern as if one voiding pattern. If flow recommences after (say) a 6 seconds delay the second volume increase pattern will be considered as being associated with a separate, second flow pattern.

FLOW AMPLITUDE ADJUSTMENT

This patients flow pattern shows a low flow at 4ml sec^{-1} and a volume voided of 53 ml and the flow amplitude trigger set at 2 ml sec^{-1} yielded the following;
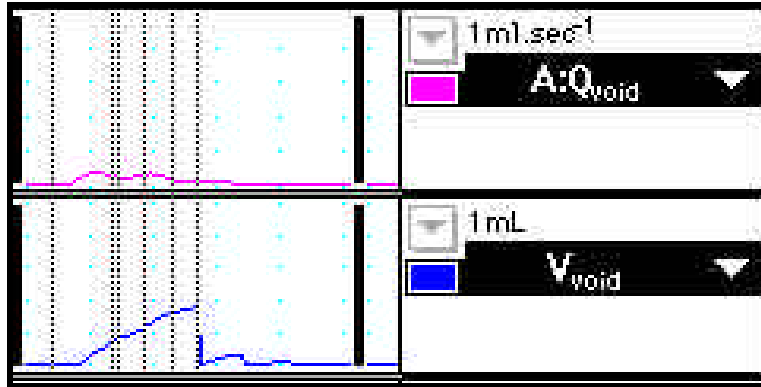
Resetting the trigger threshold to 1 ml sec^{-1} restores the Vvoid pattern to a continuous volume pattern as below;
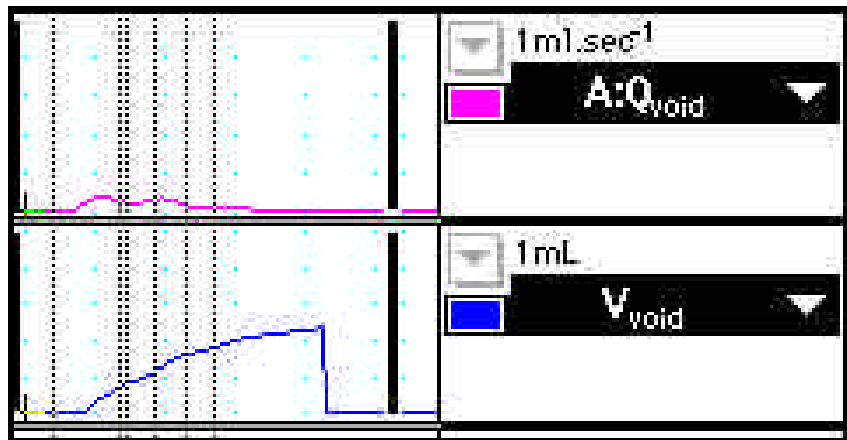

POST ACQUISITION TIME ADJUSTMENT

If the patients flow pattern is time intermittent then one has to decide what is to be adopted as the criteria for a single flow pattern. Neomedix Systems has usually set this to either 5 or 10 seconds, depending upon the clinicians preference. In the following example the delay from the first voiding burst was over 24 seconds. If the software 'end integration' was left at (say) 10 seconds you would see a multiple of individual voided volumes:
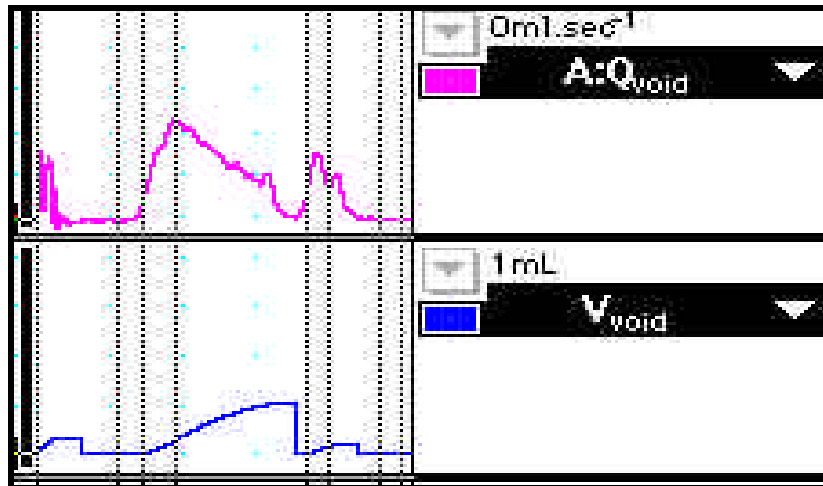
Resetting the Post Acquisition time to 30 seconds as shown in the first figure allowed this patients multiple flow (an atonic bladder with abdominal strain voiding) patterns to be considered as the single voiding volume pattern as follows;
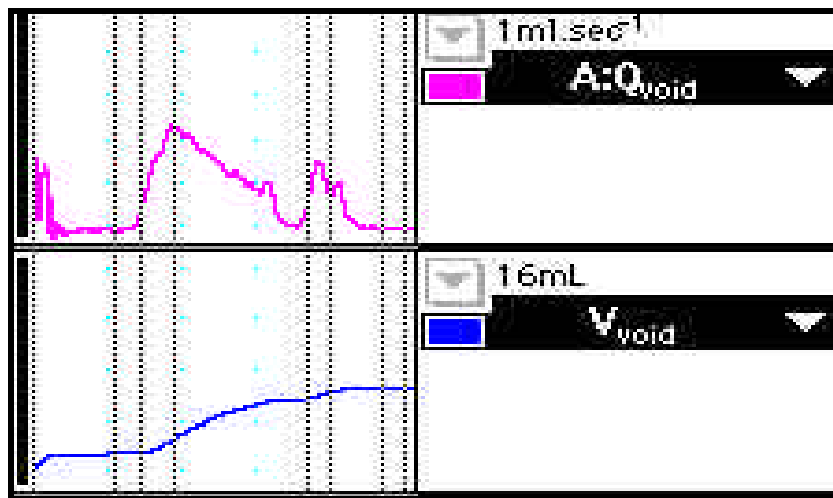
This feature is very useful for patients with flow patterns outside of those more commonly met. Our experience indicates that if the Flow Amplitude trigger is set to 1 ml sec^{-1} and the Post Acquisition Delay set to 10 seconds, most recordings will not required adjustment. Previously recorded patients can be re-analysed at any time with a modification of these time and amplitude threshold adjustments. More details of this and other Uromac software can be found in the Uromac clinical user manual.