

XHRM – A Common Data Format for HRM Recordings

The High-Resolution Manometry consensus group (<http://www.hrmconsensus.org>) has been established by clinical researchers to produce a consensus on the interpretation of esophageal manometry recordings and to standardize procedures.

To provide a common format that includes meta-information of HRM records (e.g. type of equipment, detailed study procedure), an XML based data exchange format has been developed, and named XHRM. The XML is an industry standard (XHTML in the Internet), and is the native format for Microsoft Office and Open Office.

As of DDW 2009, all major vendors of HRM equipment will support the format and have actively contributed to the definition. The current revision of the Schema (Version 0.3) can be downloaded from the web page of the HRM Consensus Group.

XHRM – What Is In It?

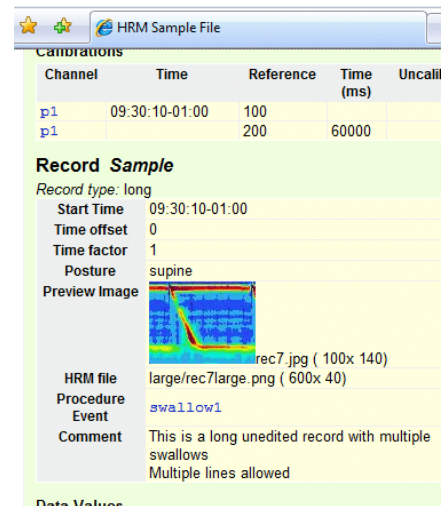
An XHRM file contains not only raw data from pressure, pH or impedances recordings, but also meta-information such as sensor positions, procedure definitions and optional public and private patient data. Additional slots are provided for classifications following the working diagnostic classification agreed to by the HRM Consensus Group.¹ Regions of interest such as LES position and esophageal junction ranges can also be defined in the data for annotation of graphics. It can be extended further by vendor specific fields to promote future development in the HRM diagnostics. Images of HRM and fluoroscopic records can be included with proper time synchronization. ¹ Pandolfino, Fox, Bredenoord, Kahrilas. Neurogastro Motil, EPub 2009

XHRM – For Clinical Database Managers

For long term documentation, XHRM records can be efficiently stored in clinical databases in a non-proprietary format, permitting fast indexed retrieval. With an attached style sheet, XHRM files with images can be displayed in a browser, allowing data managers to design customized patient reports with standard web tools.

XHRM – For Clinical Practice

One aim of the HRM Consensus Group is to define standardized procedures for clinical tests. The timing information of a procedure can be defined and easily modified in the XHRM format and used by HRM equipment to generate workflow protocols (e.g. “10 x 10 ml water bolus, supine, in 10 minutes”).



XHRM – For Science

The XHRM format has been developed in close cooperation with scientists working on the physiology of esophageal motility and mechanism of bolus transport. To support these requirements, flexible definitions of areas of interest are included and detailed sensor characteristics such as angular directivity can be defined.

XHRM – Ready For You?

If you are visiting DDW 2009: Ask for XHRM at the sites of the HRM equipment vendors.