

### Introduction

This is already the second newsletter from the support-group at CD Leycom. If you have an idea for a new subject to be discussed in forthcoming newsletters, please send an e-mail to: <mailto:support@cdleycom.com>.

More information about some of the subjects may be found on our website <http://www.cdleycom.com/> (see also hyperlinks in this newsletter). Create a user account and login as a member to get a lot of useful information.

### Mitral valve regurgitation

"In the presence of mitral valve regurgitation the left ventricle ejects blood forward into the aorta as well as back into the left atrium. Thus, the actual left ventricular work is not represented by cardiac output measured e.g. by thermodilution. Also the conductance catheter technique detects alterations in LV work only qualitatively. Quantitative analyses of LV performance can be retrospectively obtained from PV-loops. However, during mitral valve surgery when volume calibration is performed after successful valve repair. PV-loops document at-a-glance the restoration of isovolumic contraction and relaxation and numerical analysis of improvement in LV pump efficiency becomes possible by the conductance catheter technique."

(Thanks to Dr W. Heimisch at Herzzentrum Munchen)

#### References

[Diastolic unloading and improved LV pump efficiency early after repair of the insufficient mitral valve.](#)

Gunzinger R, Heimisch W, Augustin N, Mazzitelli D, Overbeck M, Bauernschmitt R, Lange R.

Deutsches Herzzentrum Munchen, Munich, Germany.

[Intra-aortic balloon pumping in acute mitral regurgitation reduces aortic impedance and regurgitant fraction.](#)

Dekker AL, Reesink KD, van der Veen FH, van Ommen GV, Geskes GG, Soemers AC, Maessen JG.

Dep. Cardio Thoracic Surgery and Cardiology, Cardiovascular Research Institute Maastricht.

### Guidewire

Using the CD Leycom 7 French over-the-wire catheters, a guidewire makes insertion of the conductance catheter quick and easy. It is recommended to use a guidewire with a diameter between 0.018" and 0.025". The total catheter-length is 150 cm, so use a guidewire with a length of 250 cm for easy handling.

### Sentron Pressure Interface

With CD Leycom catheters, you need a [Sentron Pressure Interface](#) to be able to measure pressure. If you want to try the CD Leycom catheters, you can use a Sentron Pressure Interface 1 month for free if you order more



than 5 catheters. You will get 10% discount on the Sentron Pressure Interface after this free trial period.

### Sigma 5 or Sigma 1SA

A frequently asked question is: which product to use? A Sigma-5 or Sigma-1SA?

The [Sigma 5 DF](#) is intended to be used with larger animals (from large rabbits to pigs) and has 5 segmental volume channels. The Sigma-5 DF can be used with 8-, 10- or 12-electrode catheters for Single- or Dual-Field measurements with 3-5 segmental volume signals.

The [Sigma 1 SA](#) is used in small animals (from mice to small rats) and has only 1 segmental volume channel. The Sigma-1SA should be used with special 4-electrode catheters.

### Summer-Check Sigma-5DF

When a Sigma-5DF fails to function (some existing systems are more than 20 years old!), repair is often a matter of great urgency because the Sigma-5DF is required for scheduled experiments. Very few customers send their equipment to us for preventive checks.

Therefore we have started a Sigma-5DF Summer-Check plan. During the months July - September, if you send your Sigma-5DF and accessories (no catheters) to us we will check, clean and recalibrate the equipment and accessories at a total costs of Euro 495 (USD 625 for US-based customers), including shipping back to the customer. If any repairs are necessary these will be done free of charge if the costs of the spare parts do not exceed € 100. The equipment will be returned to the customer within 4 weeks from delivery at CD Leycom headquarters, usually even sooner.

### Contact CD Leycom

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