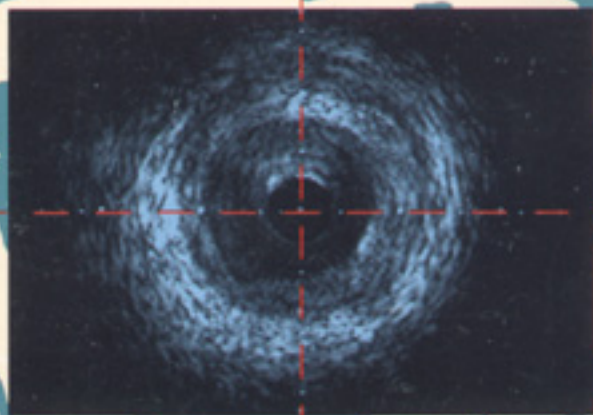


INSIGHT:  
INTRAVASCULAR  
ULTRASOUND  
WITH VISION

CVIS



**A**  
clinical  
decision is  
based on what  
you see, so every  
detail counts. These  
details influence not only  
your clinical approach, they can  
impact procedure outcome. That's  
why seeing is not enough. You need vision!

**IMAGE QUALITY:  
THE CRITICAL DIFFERENCE**

As catheter-based interventions become increasingly sophisticated, you need visual information that simplifies your clinical decisions. INSIGHT gives you that information.

characteristics and intraluminal pathologies that impact your clinical decisions. Information presented by a broad range of gray scale that can only be achieved with the CVIS INSIGHT system.

INSIGHT utilizes a mechanical imaging design capable of the highest resolution in intravascular ultrasound imaging so that tissue detail is accurately presented—without artifacts caused by acoustic noise and transducer ringdown.

A broad dynamic range, high resolution, high frequency imaging, a mechanical system design—a combination of features that can make the critical difference in diagnosis and management of vascular disease.

**THE DELIVERY SYSTEM:  
ELEGANTLY SIMPLE**

INSIGHT's catheter delivery systems are state of the art. They transcend the limits of micromechanics by delivering one-piece, over-the-wire catheters that are as easy to use as

the most elegant interventional devices. They can be advanced rapidly over a guidewire to the regions of interest and exchanged easily for assessment both pre- and post-intervention.

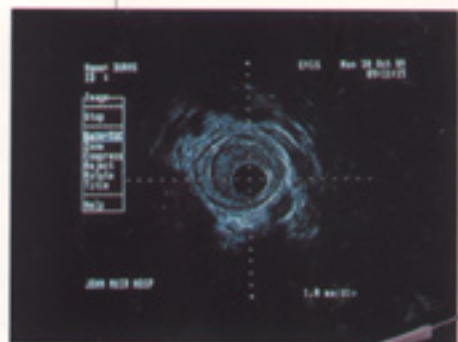
INSIGHT's ultra-low profile, coronary catheter is more maneuverable and easier to handle so it can go where other catheters can not—through conventional guide catheters—to more distal anatomies.

This elegantly simple design conforms to your needs during angiography or interventional procedures, making it easy and fast to obtain critical clinical information.

**REAL-TIME IMAGING:  
GUIDANCE FOR INTERVENTIONS**

INSIGHT gives you real-time answers to critical questions—when you need them—during interventional procedures. It enables you to see the exact location, severity and morphology of the plaque as well as adjacent structures. It helps you to identify dissections, flaps and other intraluminal defects—at and beneath the surface.

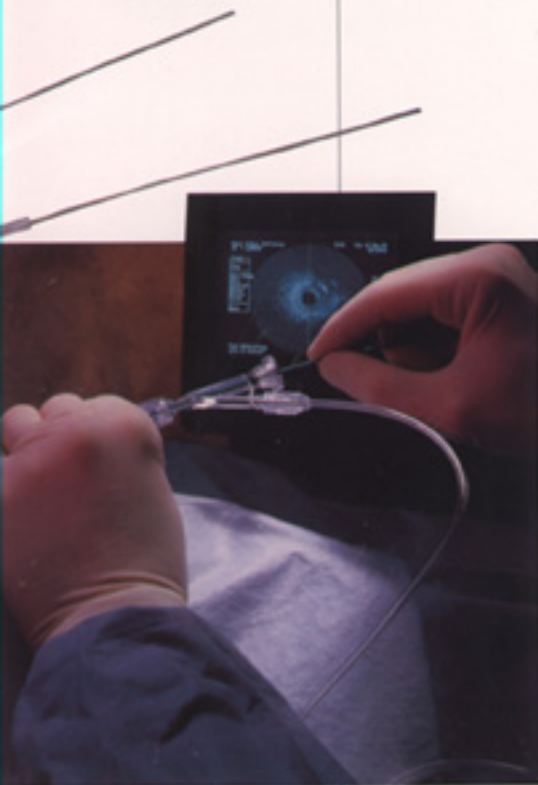
No matter when you need real-time answers, INSIGHT can augment angiographic findings with high resolution intravascular ultrasound images. Images that can provide



*Advanced engineering  
design results in INSIGHT's  
exceptional ergonomics.*

Its patented, catheter-based, mechanical ultrasound technology provides an accurate cross-sectional image from within your patient's vascular system. INSIGHT shows you clear, high resolution detail of vessel morphology that you can't get any other way. Details of vessel size, structure, plaque burden, tissue

Left: INSIGHT's cross-sectional image of vessel morphology reveals high resolution detail. Below: INSIGHT's catheters are exceptionally easy to use.



better guidance before, during and after interventional procedures:

- **Angioplasty:** estimate vessel size to select the appropriate balloon catheter and assess post dilation results.
- **Atherectomy:** identify location and thickness of atheroma for selective removal.
- **Laser therapy:** target areas of localized plaque to minimize risk of perforation.
- **Vascular stents:** accurately determine vessel size to assist in selection and deployment.

**PHYSICIAN-DESIGNED:  
FOR CLINICAL APPLICATIONS**

The INSIGHT imaging system was developed by physicians with extensive experience in cardiovascular diagnosis and treatment. It was designed to provide a practical and convenient way to obtain clinically useful diagnostic information.

INSIGHT's compact, ergonomic design fits neatly into the cardiac catheterization, special procedures laboratory or O.R. The menu-driven console and easy-to-read display simplify operation while the hand-held remote control and Motor-Drive units facilitate operation from the sterile field.



INSIGHT's imaging catheters are trackable over a guidewire to facilitate small vessel access.

Finally, measurement and analysis of vessel structures, plaque thickness, vessel size and percent stenosis have never been easier. A surface trackball puts these calculations at your fingertips.

**THE CVIS CHOICE:  
AN ULTRA SOUND DECISION**

CVIS simplifies another important aspect of clinical decision making: the choice of an ultrasound imaging partner.

In addition to leading-edge imaging technology, CVIS offers leading-edge service. The professional support staff at CVIS includes experienced ultrasound specialists, catheter development experts and clinical applications specialists.

These professionals are available for training and telephone technical support when you need them.

CVIS combines your needs for accurate intraluminal information in a single device—INSIGHT. INSIGHT brings superior image quality, ease of use, a dedicated support staff and ongoing R&D together, making CVIS an ultrasound investment decision.

For complete information or a product demonstration, contact your CVIS representative.

*Different catheter sizes allow investigation of a variety of vascular anatomies.*



## OVERVIEW

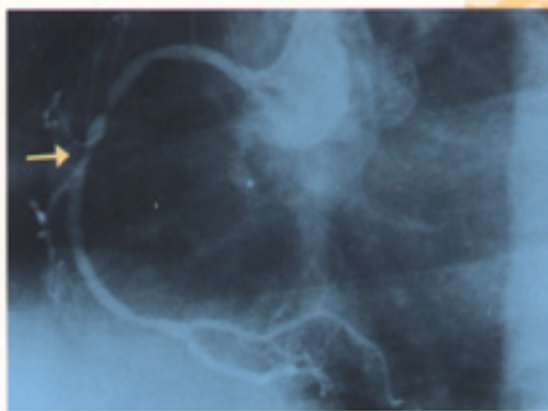
This case report demonstrates the value of intravascular ultrasound imaging in achieving more complete debulking of the plaque burden from a right coronary artery. ▲

## PATIENT HISTORY

The patient experienced chest pain, which was attributed to multiple focal lesions in the right coronary artery, seen angiographically. ▲

## PRE/POST-TREATMENT ASSESSMENT

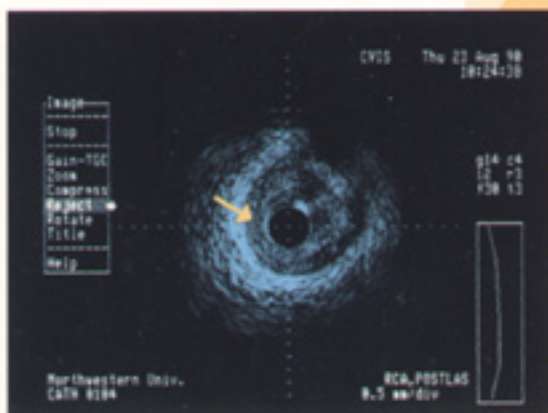
**Angiogram:** Three focal lesions were identified angiographically in the RCA: at the proximal RCA, mid-RCA, and a mild occlusion in the distal RCA. For purposes of this case report, the mid-RCA lesion is highlighted. ▲



Pre-treatment angiogram

**Ultrasound:** Initial ultrasound evaluation was performed after the first pass of a 1.7mm laser probe through the proximal and mid-RCA lesions. ▲

This ultrasound assessment revealed the mid-RCA to be 4.5mm in size normally. Post-laser therapy, the vessel lumen was 1.7mm, representing an 86% occlusion. ▲



Ultrasound image post laser shows obstructive plaque.

## ULTRASOUND IMAGING OF RIGHT CORONARY ARTERY

▲ Laser

▲ Angioplasty

Northwestern Memorial Hospital  
Department of Cardiology