

CARIES DETECTION: THE WAIT IS OVER!

Caries detection devices and intraoral cameras are paving a faster, clearer, and less invasive path toward the treatment of early-stage decay

There's more than one way to find a cavity. While visual inspection and radiographs can still be invaluable tools in many clinical scenarios, the world of dental technology has opened the door for ancillary tools, such as caries detection devices, that use technologies such as transillumination and fluorescence to react with the bacteria in carious lesions. The result is a clearer picture of decay and an opportunity to repair and remineralize affected tooth structure before the problem worsens.

In her Woodland Hills, CA, practice, Dr. Pearl Zadeh focuses on providing her patients with minimally invasive and holistic dentistry. Air Techniques' CamX Spectra, which uses fluorescence technology and an easy-to-read color scale to identify carious lesions, helps her do just that.

"I can catch and detect caries at an earlier stage so that my patients receive the most conservative treatment possible," she shared. "These early caries and decay, which appear in fissures and smooth surfaces or hidden between the margins of composite restorations, may not have shown up on x-rays or images alone."



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While caries detection devices assist with routine detection and diagnosis of caries—which often leads to much-needed early intervention— intraoral cameras serve as a valuable patient education tool that illustrates what's going on in the mouth so patients more readily accept treatment.

Shaped like an oversized pen, intraoral cameras use features like advanced LED lighting, autofocus, and dual capture buttons to create high-quality diagnostic images with ease. Although they first landed on the dental scene nearly 3 decades ago, it has taken some time for the tool to reach its current state of acceptance, in which intraoral cameras are used by nearly 3 out of 4 dental professionals.

Here, we'll explore both camps—caries detection devices that non-invasively detect hidden cracks and lesions, and intraoral cameras that boost treatment acceptance by offering patients a window into their oral health. Both technologies take us



CamX Spectra

down paths that invariably lead to the same destination: early intervention.

Before we know it, these tools won't just be ancillary—they will be our new standards of care.

Caries Detection Devices

The **CamX Spectra** from Air Techniques uses fluorescence to detect caries in fissures and smooth surfaces, and decay hidden between restoration margins that can go undetected by x-rays. Four violet LEDs stimulate the metabolic products in cariogenic bacteria, causing them to glow red while healthy enamel glows green.