DR. WILLIAM G. HARPER

What's New With Cosmetic Dentistry?

By Alison Johnson

The perfect teeth that people seek from cosmetic dentistry, it turns out, aren't "perfect" at all. They're not all one shade of white; in fact, they might have flecks of brown, reds and yellows mixed in. They have tiny ridges and bumps that deflect light more subtly than a completely smooth surface would. Their size, shape and position often fit best with their owner's face and jaw line.

An increased focus on preserving or recreating those slightly "imperfect" teeth has transformed cosmetic dentistry, says Dr. William G. Harper, DDS, who offers esthetic and general dentistry services in Poquoson. With advancing techniques and materials, dentists can preserve more natural tooth structure and enamel during popular

procedures such as whitening and reshaping. Patients come out looking new and improved – and natural.

but, always close to his three younger brothers, knew he'd want a career that allowed for a good work/family balance. As he studied for a biology degree at James Madison University, he decided dentistry, which still involved

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doctors and nurses to do so much to help me."

Dr. Harper considered becoming a surgeon

a biology degree at James Madison University, he decided dentistry, which still involved working with his hands, was the answer. He earned post-graduate degrees from Virginia Commonwealth University/Medical College of Virginia and the United States Navy.

After three years as a Naval Dental Officer, with assignments in Florida and North Carolina, Dr. Harper moved into private practice in Poquoson nine years ago. He and his wife, Lori, are raising three young children,

and Dr. Harper has time to coach their basketball and soccer teams. He currently has no problems with

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"My goal is for people to know my patients look better but never suspect they've been to see me," Dr. Harper says.

Before deciding on cosmetic work, patients should ask a potential dentist for before-and-after photos of previous patients. It is important to do your homework to determine what dentist is best for your needs.

Dr. Harper's job is a two-part challenge, and he enjoys both. First, he improves patients' oral health, which doctors have learned is critical to overall physical well-being. Second, he addresses embarrassing cosmetic concerns – stained, broken or missing teeth – that make patients hide their smiles.

"Seeing them make progress, even if it's slow, is hugely rewarding for me," he says.

Dr. Harper, 38, has wanted to work in a medical field from an early age. The Fairfax, Virginia, native had severe asthma as a child, which frequently landed him in the hospital for several days at a time.

"I became fascinated with how people healed,"

he remembers. "I don't remember being afraid; it was more like, 'Here we go again.' I do

asthma.

In his office, professional tooth whitening remains the most popular cosmetic procedure. Bleaching is painless and generally safe for people 16 and older, once enamel and other components of teeth are fully formed. Most patients wear a tray with a whitening agent for four hours a day or night over two to four weeks. Some choose to repeat the treatment, while others can maintain their results for two or three years without more work.

People concerned about the color of their teeth should talk to a dentist sooner rather than later. "You can nip problems in the bud more quickly and with less treatment," he says. His patients range in age from teenagers who have just had braces removed to seniors hoping to erase years of teeth-darkening coffee, soda, tea, red wine and tomato-based sauces. Many are Baby Boomers who have become grandparents, posed for lots of pictures and not liked how they looked.

"Most are simply trying to recapture the esthetics that they once had," he says. "Bleaching under the direction of a dentist is the most cost-effective, safe, conservative and long-lasting way a person can save or recover their smile. It's very easy. A lot of people will ask, 'Why didn't I do this sooner?"

Bonding, or reshaping teeth with white filling materials, is another popular option. Cosmetic dentists often partner with ortho-



dontists to properly align teeth first, which can allow them to use fewer artificial materials to improve a smile. The goal is to preserve enamel whenever possible.

"Much of a tooth's strength and structural integrity of the teeth and mouth comes from enamel," Dr. Harper says. "There's also nothing better esthetically than good, natural enamel."

Ideally, cosmetic dentists can layer in tooth-colored plastic or glass materials called resins, rather than stripping enamel and adding thin porcelain shells called veneers across all teeth. Veneers – either alone or in combination with resin bonding – are a good option if enamel is missing or damaged and can be an alternative to crowns, or caps placed over teeth.

With the most conservative approach possible, patients should have teeth more resistant to breaking and chipping with age.

"Since patients are living longer, more productive, more active lives, our goal has become to help them achieve their smile goals and have teeth that will be strong, healthy and comfortable. Modern techniques allow us to do that with less aggressive treatments," Dr. Harper says.

Dentists also can help patients who are unhappy with older, more unnatural cosmetic

work. "We now have porcelains that can provide more complex interactions with light, similar to natural tooth structure, instead of simply reflecting light," Dr. Harper says. "The way that light will 'paint' an object is the key to how the object is perceived." Think about hair dye: a mixture of colors and highlights is almost always better than one block of color. "We might use little white spots here and there, for example," Dr. Harper says. "They won't be obvious to the naked eye, but they will break up color in a natural way."

Dental implants have followed the same trend toward a more natural look. Previously, patients missing a tooth had no choice but obvious bridge or denture work that they often wanted to hide. "Years of success with implants and better materials have enabled us to replace teeth that appear to naturally emerge from the gums as if they erupted there," Dr. Harper says. "Patients can have the confidence to know that no one will be able to detect the difference."

Digital technology has fueled the constantly improving results. During consultations with patients, Dr. Harper can project enlarged, detailed photos of teeth on a 24-inch monitor to zero in on tiny trouble spots. He also can instantly send images to

surgeons, orthodontists and ceramists, whose painstaking work results in replacement teeth. That allows for closer collaboration and better follow-up care.

Digital technology will only get better, Dr. Harper says: "Developments that are three to five years from becoming standard practice include digital impressions, digital analysis and development of how teeth fit together, and further appreciation of how the esthetics of the face must factor in the position and relationship of the teeth, gums and bone of the jaws."

Dr. Harper also expects an emphasis on prevention of problems – both before and after cosmetic work – to gain momentum. Patients generally understand the importance of brushing, flossing and seeing a dentist regularly, but many have a lot to learn about diet and the number one cause of decay: sugar.

For anyone afraid of dentists, Dr. Harper encourages them to simply come in and talk. At an initial consultation, dentists can answer questions, make suggestions and maybe take a few pictures.

"So many people are walking around with teeth they're not proud of because they don't think they have any options," he says. "I want them to know that they do." **65**