BEAUTY SKIN

convinced yet. "I just think it's too much for the patient, and there's a risk of confusion in a busy doctor's office. It's not for me," says Manhattan dermatologist Patricia Wexler, M.D. "Between Sculptra, Restylane, fat, and Radiesse, we have enough."

STEM-CELL FACELIFTS

The much hyped, so-called stem-cell facelift—a term dismissed by the American Society of Plastic Surgeons and most credible doctors—is little more than a new way to describe fat injections, or fat grafting.

While a patient's own fat-as-filler has traditionally been prized for its longlasting results and ability to fill large areas, it is only recently that studies have confirmed fat cells to be the body's richest source of adult stem cells, too.

Sydney Coleman, M.D., clinical professor of plastic surgery at NYU's Langone School of Medicine, has been a pioneer in the field of fat grafting and adult stem-cell research. "What I observed as far back as 1992 was that when you put fat under the skin, you see a change that's beyond filling: Not only does it plump it out a bit but it improves the color and tone of the skin and decreases wrinkles and pore size. So with each fat transfer, stem cells that can potentially repair aging and sun-damaged skin are transplanted as well."

While studies confirm that adult stem cells (which release growth factors, in turn stimulating fibroblasts into action) are indeed present in fat, studies specifically examining what those stem cells do once transplanted into healthy facial skin are just now under way. So, for the time being, "it's hard to say exactly what's improving the texture of the skin," says Airan. "I know from experience that any kind of filler injection will improve the quality of the skin just by stretching the existing fibroblasts. The added volume actually stimulates them. Still-and it's not quantifiable. it's subjective-I think when you inject fat, the texture improves more than with other fillers"

In terms of alternate theories, "fat turns out to be very active in the hormonal system, and there are a lot of estrogen receptors in fat, so it's possible that some of the ameliorative effects on the skin are due to this and don't have anything to do with stem cells," says Richard Glogau, M.D., clinical professor of dermatology at the University of California.

Still, it is clear that fat has a beneficial effect on skin that extends beyond just filling. Fat grafting has now been integrated into the protocols of most facelifts, because, as Coleman says, "tightening and stretching the skin just simply isn't enough. You need the volumizing effect of fat and also the rejuvenating effect on the skin."

Fat's downsides have always been its unpredictability—whether or not the graft will "take"—and the timeconsuming nature of the numerous treatments required for optimal results.

Because fat is permanent, Coleman often recommends that new patients start with a temporary artificial filler like Juvéderm, Restylane, or Radiesse to see how they like the added volume. Then they can move on to fat grafting. But, he adds, "it really needs to be injected by someone who knows how. It takes talent; if you put in too much or too little, or put it in irregularly, it can be a problem. A doctor needs to know how to process the fat, and then place it. Once you inject the fat, that's it." \Box

To find a qualified, board-certified doctor, consult aad.org, or plasticsurgery.org.