Is Kybella the Next Big Thing?
One surgeon shares his insights and experience with Kybella

By Joe Niamtu III, DMD

Mesotherapy has come in and out of vogue, but it has never been mainstream. The active ingredient in many mesotherapy formulas is deoxycholic acid—which is the same ingredient in Kythera Biopharmaceuticals’ new fat-dissolving injectable Kybella

Kybella received US Food and Drug Administration approval for the treatment of submental fullness in late April 2015. Although many nonsurgical niche treatments come and go, Allergan purchased Kythera for $2.4 billion. This in itself portends big things, as Allergan obviously sees significant potential for the current on-label usage as well as future applications.

Kybella is a synthesized version of a natural bile salt that aids fat digestion. It is a cytoytic drug that, when injected into subcutaneous fat, destroys the cell membrane and produces adipolysis. The released fat is absorbed by the body.

Kybella is metabolized and excreted in the feces. Retreatment is not necessary, as the treated fat cells are permanently destroyed. The purchase price of Kybella for physicians is about $150 per 2-mL vial.

PATIENT SELECTION AND SATISFACTION
Patient selection will be key. Kybella is indicated for isolated submental fat deposits without skin excess. This is a limited pool of patients. Many of the patients that present for Kybella do have skin excess and are not candidates for treatment. I think that younger patients with smaller fat deposits are the optimum patients. Although submental fat can be effectively removed with a 15-minute liposuction treatment, many patients will opt for a nonsurgical treatment over liposuction.

It is important to gather standardized data for which to compare final results in patients. This should include weighing all patients before treatment. Standardized photography is also paramount. Small changes in posture, head and chin position, lighting, and background can falsely influence before-and-after pictures.

Two randomized, multicenter, double-blind, placebo-controlled studies evaluated Kybella for improvement in the appearance of submental fat. Reductions in submental fat volume were observed more frequently in the Kybella group compared to the placebo group. Results were evaluated with magnetic resonance imaging, patient discussion, and surveys. The results showed that reductions in submental fat were observed more frequently in participants who received Kybella versus placebo.

THE KYBELLA EXPERIENCE
The treatment takes about 15 minutes and is simple to perform. Skin is prepped for submental injection in the usual manner. Kybella is supplied in 2-mL vials (10 mg/mL) that are stable at room temperature and do not require reconstitution. The average initial treatment requires two to three vials (4 to 6 mL) of Kybella, which can be up to 50 metered injections.

Follow-up treatments may require fewer injections. Treatments are repeated anywhere from 30 to 60 days apart. Two to four treatments are usually adequate, although up to six treatments can be performed.

FINDING THE SWEET SPOTS
Like any injectable, the key lies in placing the right amount of the drug in the right place and avoiding significant
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Figure 3. A before-and-after image from the Kybella FDA trials, magnetic resonance imaging frontal view.

Figure 4. A before-and-after image from the Kybella FDA trials, lateral view.

State that compression makes them more comfortable the first night. All patients will experience swelling, which progresses overnight to an edematous “wattle.” This lasts about 48 hours. Most patients will have some bruising and describe their discomfort as mild to moderate. There may be a component of paresthesia in the treatment region. The area returns to normal over 2 to 4 days.

If this treatment proves to be effective, there will likely be many other uses for other regions of the body. At present, I can also see this to be a possible treatment for post-facelift residual submental fullness. In the studies that led to FDA approval, Kybella patients reported moderate improvements after 12 weeks, but as we gain experience with dosage, we will likely see more substantial results.

Ed note: This is a brand-new treatment, so I do not have personal before-and-after pictures yet. Figures 3 and 4 are company photos from the clinical trials.

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