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Dr. Rotunda co-invents new treatment called Kybella<sup>™</sup> - an injection that reduces fat - hailed as the 'next Botox<sup>®</sup>'!

Kybella<sup>™</sup> is the first non-surgical, minimally invasive treatment approved by the FDA to eliminate submental fat, otherwise known as neck fat, or the dreaded 'double-chin'. Dr. Rotunda co-invented deoxycholic acid as a treatment for fat reduction during his UCLA dermatology residency and now, over 10 years later, after rigorous testing in FDA clinical trials, it is known as Kybella<sup>™</sup>, a safe and effective treatment for patients worldwide.

Prior to Kybella<sup>™</sup>, previous treatments for submental fullness (neck fat or "double chin") were limited to liposuction, a surgical procedure to remove excess fat. Submental fullness results from genetics (look at your parents!), aging and weight gain, and about 70% of men and women are bothered by it to some degree, affecting their confidence and self-esteem.

As a pioneer of deoxycholic acid, Dr. Rotunda has unparalleled depth of knowledge and experience with Kybella<sup>™</sup>.



# Dr. Rotunda's Story

As a dermatology resident at UCLA in 2003, Dr. Rotunda, alongside Michael S. Kolodney, MD, PhD, performed a series of experiments showing the effects of deoxycholic acid on fat. They investigated that deoxycholic acid reduced and destroyed lipomas, disturbing but benign fatty tumors. Through an additional clinical trial, Dr. Rotunda and other colleagues proved that deoxycholic acid reduced under the chin fat, which could otherwise only be eliminated with liposuction.



"Meet me in the lab!" Drs. Rotunda and Kolodney investigate deoxycholic acid (before it was Kybella™) in 2003.

After a decade of treating over 2600 patients in 11 clinical trials conducted by a biotech company called Kythera Biopharmaceuticals, deoxycholic acid was finally approved by the FDA as a treatment of moderate to severe submental (below the chin) fullness on April 29, 2015 under the name Kybella<sup>™</sup>.

Over the past decade, Dr. Rotunda has continued to research, contribute to and teach about injectable fat loss treatments. Dr. Rotunda therefore has a very unique knowledge about and experience with deoxycholic acid – he was there from the beginning (quite literally) and now is humbled to see it available to potentially benefit millions of patients. He is absolutely honored to be able to offer it in his practice.

# How It Works

Kybella<sup>™</sup> is a prescription medicine approved for the reduction of moderate to severe fat below the chin. Its active ingredient, deoxycholic acid, *breaks down fat cells permanently*. Deoxycholic acid occurs naturally in our bodies to aid in the digestion of dietary fat in our intestines. A synthetic, purified version of this natural chemical found in our bodies is used in Kybella<sup>™</sup>.

Studies show that after treatment, fat is slowly removed from the treated area through the bloodstream. In those studies, cholesterol, triglyceride, and free fatty acid levels (all measures of fat in your blood) increased after the injection no more than what would occur after a meal. Kybella<sup>™</sup> will not make medical conditions like high cholesterol or high triglyceride levels worsen. As well, the removed fat will not be deposited somewhere else.



Fat cells intact

Fat cells exposed to Kybella™

Fat washed away



#### What is the treatment like?

Your neck and chin area will be marked with a pen and then a mixture of anesthetics will be injected to ensure comfort during and soon after the procedure. Alternatively or additionally, a topical cream anesthetic will be used. A marking template will then be applied and Kybella<sup>™</sup> will be injected with a very thin needle into the fat layer below the skin. You may be in the treatment room for 15-30 minutes but the injection part of the procedure takes only about 5 minutes. Such a short time for such a lasting benefit!

#### How many treatments are needed?

Most patients require 2-4 treatments, spaced 4-6 weeks apart. Occasionally, patients with a larger amount of fat will need 5 or more treatments.

# What type of patient will get the best results?

Adults with firm (not loose or hanging) skin and excess fat below the chin and on the neck that can be pinched with their fingers are typically very good candidates. Because this product will not help saggy skin, patients with very lax or loose skin may not be ideal candidates.

Ideal candidates are also patients who are patient! Kybella<sup>™</sup> works over many months, so patients who desire to lose the fat immediately may want to consider liposuction instead. However, while liposuction's effects are relatively immediate, the rapid changes may be obvious to others, causing the patient to feel self-conscious.

Kybella<sup>™</sup> on the other hand, creates the illusion to others that weight is being lost gradually, allowing for a more natural and therefore less obvious change.





3 treatments total, 3 vials per treatment





#### Are men also candidates?

Absolutely. In fact, many men hesitant to enhance their appearance with Botox<sup>®</sup> and fillers are very willing to reduce their neck fat with Kybella<sup>™</sup>.

With a more chiseled profile, men appear healthier, younger and less overweight. And because the effects appear gradually (over months), it is not obvious to others that "work was done."

<sup>5</sup> treatments total, 3 vials per treatment

## Will I need other treatments as well to make my chin and neck look their best?

Lax, saggy skin or jowls can be improved with some energy based devices and fillers. Botulinum toxin (Botox<sup>®</sup>) can reduce prominent vertical neck bands (platysmal bands), which may appear to look more prominent after Kybella<sup>™</sup> treatments since they become "unmasked" when the fat no longer hides them.

# What are alternative treatments for submental fullness?

Liposuction is the only truly effective and accepted alternative treatment.



3 treatments total, 2 vials per treatment





4 treatments total, 2 vials per treatment

# What happens to my neck skin as I lose the neck fat?

For most patients, the skin remains just as tight as before treatment. This is because deoxycholic acid produces tightening effects in the skin as the injected area heals. Some patients with pre-existing loose skin may have increased wrinkling or more obvious banding ("platysmal bands") of their neck. There are additional cosmetic treatments to reduce neck wrinkling and platysmal bands.

### Are results permanent?

Yes! However, weight gain or increasing skin laxity with age might cause double chins to recur.

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### What are the side effects?

Most of the side effects are a result of the disruption of the fat by deoxycholic acid – that's just how it works! This disruption is really a controlled injury, so like any other injury, you will be tender and swollen. A majority of patients have swelling and/or bruising for several days to up to a week, and patients concerned about this may wish to begin treatment close to a weekend.

Many patients have skin redness and tenderness to the touch, and numbness may occur as well, which may last for several weeks (this usually is not bothersome and it actually may make the next treatment more comfortable). Fortunately, most of these side effects lessen on subsequent treatments, sometimes substantially.



5 treatments total, 3 vials per treatment

Rare side effects include: difficulty swallowing during the first few days (this is thought to be due to the neck swelling, not harm to the throat); nerve damage causing an uneven smile or facial muscle weakness (very rare); skin darkening above the areas injected; and for men, some loss of beard hair. Fortunately, all of these side effects are transient, or short lived.

### How should I prepare for my treatment?

- To reduce the risk of bruising, avoid aspirin, ibuprofen (Advil<sup>®</sup>), vitamin E, fish oil and similar medications for 1-2 weeks before your treatment. You may also wish to reduce drinking alcohol for several days prior to the treatment and use Arnica Montana starting the morning of your treatment or immediately after.
- Men should shave their neck and beneath the chin the morning of their treatment.
- Take 400 mg of ibuprofen (2 tablets of Advil<sup>®</sup>) and 1 Extra-strength Tylenol (500 mg acetaminophen) 1 hour before treatment to reduce swelling.

### What do I need to do after my treatment?

No special care is needed afterwards except perhaps icing the area for the rest of the treatment day to relieve tenderness. Women may wear a scarf to hide the swelling or makeup to hide the bruising.



4 treatments total, 3 vials per treatment