The first time I treated a true gummy smile in clinic, the patient walked in with a stack of photos from different angles, each one capturing the same pattern: a bright smile, strong lip elevation, and 5 to 7 millimeters of visible gingiva. She loved her smile’s energy but disliked the imbalance. Fifteen minutes later, with a few precisely placed units of botulinum toxin, we began a six-week process that changed both the way she smiled and the way she felt seeing herself in candid shots. The lesson that stuck with me is simple: gummy smile correction has little to do with “freezing” and everything to do with tuning muscle dominance and movement arcs.

What creates a gummy smile, anatomically speaking

A gummy smile is not just “too much gum.” It is often a combination of skeletal proportion, tooth eruption patterns, lip length, and most predictably for injectable treatment, overactive elevator muscles of the upper lip. The prime players are levator labii superioris, levator labii superioris alaeque nasi, and zygomaticus minor, with contributions from the depressor septi nasi and occasionally the orbicularis oris when the upper lip tightens on animation. In practice, I start with a functional assessment. Have the patient speak, laugh, and then smile hard enough to show upper molars. Watch the nasal base lift, the alar flare, and the midline of the philtrum. True gummy smiles tend to show a clear, rapid upward pull centered around the alar base, with the upper lip shortening more than 20 percent compared to the resting length.

This mapping of motion matters, because the same technique will not serve every face equally. A patient with short upper lip length at rest needs a lighter hand than a patient with normal lip length but hyperactive elevators. Meanwhile, those with a strong nasal flare often require a small dose to the alar segment to prevent “smiling from the nose,” a common pitfall after correcting only the central elevator complex.

Botox as a functional tool, not a blunt instrument

The art of this treatment lies in how little toxin we can use while achieving a pleasing reduction in gingival display. Think subtle, not heavy-handed. The target muscles are small and thin. A half millimeter of diffusion can be the difference between the perfect result and a flat, non-expressive upper lip. For most gummy smiles, I treat the levator labii superioris alaeque nasi at the alar base, then balance the levator labii superioris slightly lateral to the nasolabial fold, sometimes with a third microdroplet at the zygomaticus minor insertion if lateral display dominates.

When someone has a dominant depressor septi nasi that tugs the tip down while the elevators pull the lip up, a punctate dose at the columellar base helps smooth the interplay. The technique favors microdosing to preserve spontaneity and avoid that “shelf” effect where the upper lip looks pasted down on big laughs.

Dosing strategy and unit mapping for the midface

There is no single recipe. I plan dosing according to muscle strength testing, animation analysis, and history of prior toxin response. With that said, common ranges apply. For the alar base points (levator labii superioris alaeque nasi), 1 to 2 units per side is often enough. For the levator labii superioris, another 1 to 2 units per side, placed slightly lateral, catches the broader elevator pull. If lateral gingiva shows more than medial, a small 0.5 to 1 unit to the zygomaticus minor region can balance the smile. When the depressor septi nasi contributes, I use 1 to 2 units at the midline just above the columellar base.

Dose matches muscle strength, not the calendar. A patient with strong elevators and thick muscle fibers may need totals of 5 to 8 units across the midface. A patient with delicate features and thin skin might look over-relaxed with more than 3 to 4 units total. First-time patients almost always begin lower, then adjust at the two-week review. Repeat patients who metabolize quickly or who exercise intensely may need 10 to 20 percent more to hold the same endpoint.

Injection depth, diffusion, and needle angle

Treating elevator points well requires precision with depth and product handling. I prefer a 32 to 33 gauge needle and a perpendicular approach, lightly tenting the skin to ensure a superficial to mid-dermal placement just **affordable Greensboro botox** over the muscle belly. Deep injections risk spread to unintended fibers or even the levator anguli oris, which flattens the smile and can create a strange transition from the philtrum to the commissure.

Diffusion control starts with dilution ratios and injection spacing. A standard dilution of 2.5 units per 0.1 mL helps minimize spread at each point while delivering a predictable effect. If someone has extremely fine tissue, I might use a slightly more concentrated mix so each droplet is tiny, with points spaced 6 to 8 millimeters apart. In a broader or more muscular midface, spacing can widen to 10 millimeters. Gentle pressure after injection to flatten the droplet helps avoid pooling without massaging product into unintended areas.

Safety margins near the nose and periorbital region

The nasal base sits next to critical lines of movement for expression and airway. The safety margin involves two anchors. First, keep alar base injections lateral to the nostril sill and superior to the nasofacial crease by a few millimeters, so the product catches the levator labii superioris alaeque nasi without relaxing the inner alar tissues that stabilize the nostril. Second, avoid chasing bunny lines with broad injections that creep toward the medial canthus. Crowding the periorbital area increases the risk of migration and can lead to unwanted relaxation of tissues that give the eye its crinkle. When treating bunny lines in the same session, use the lightest possible dose and keep it lateral to the bone ridge to prevent over-relaxation.

The timing: onset and touch-up planning

Most patients feel the early effects around day three to five, with full expression by day ten to fourteen. I schedule a focused smile check at two weeks to evaluate the symmetry, nasal base lift, and lip inversion. If we need a touch-up, it is usually a 0.5 to 1 unit nudge on one or two points. Optimizing at two weeks is preferable to guessing more at the first visit. It lowers the chance of impairing speech or creating a bulky upper lip posture.

Those with fast metabolism or high facial activity, including instructors who project their voice or athletes with elevated circulation and heat exposure, sometimes experience shorter longevity. For gummy smile correction, I see ranges from 8 to 14 weeks in typical patients. Heavy exercisers can lean toward the lower range. Touch-ups at 8 to 10 weeks can maintain consistency, but I am careful with cumulative dosing to avoid long-term over-relaxation.

Longevity, metabolism, and muscle strength

Toxin duration depends on several factors: individual enzymatic activity, muscle fiber type distribution, habitual movement patterns, and dose relative to muscle mass. A patient with thick zygomaticus minor fibers and a brisk smile reflex will burn through a light treatment faster than a patient with softer tissue and slower animation. If someone reports that results fade by week six while using standard doses, I first confirm technique, then modestly increase units or adjust dilution to better localize the effect. Occasionally I space injection points slightly closer to cover microclusters of overactive fibers.

Some patients develop partial resistance, especially after very frequent or high cumulative dosing over years. Signs include shortened duration despite increased dose and proper technique. If I suspect biologic resistance, I rotate to another botulinum toxin formulation and lengthen intervals. True antibody-related resistance is rare, but functional tolerance from muscle compensation is common. Strategic breaks, dose redistribution, and refresh of injection planes often restore performance.

Preventing a flat, unnatural upper lip

An elegant gummy smile correction keeps the smile warm. The upper lip should still roll slightly outward as the orbicularis oris engages. Over-treating the central elevator points is the fastest path to that odd “rubber band” look where

the lip’s red border stiffens and the philtrum goes quiet. To avoid this, I never chase complete gingival coverage on the first pass. I aim for a reduction of 2 to 3 millimeters of display. If the patient wants more, we add fractional units at the follow-up. Preserving lateral smile lines matters too, because they signal authenticity even when teeth show less gum.

When a patient already has thin vermilion or vertical lip lines, the correction needs special restraint. Botox can improve perioral fine lines when used superficially in microdroplets, but in gummy smile work, too much orbicularis oris relaxation interferes with whistling, straw use, and speech fluency. For those with tricky perioral dynamics, I often stage treatments two weeks apart, first addressing the elevators, then deciding if any superficial lip microdosing is warranted.

Balancing nasal flare and the role of the depressor septi nasi

Many gummy smiles are accompanied by a strong nasal flare. If you treat only the levators, the nose can look busier when the gums relax, creating a new distraction. A small lateral alar dose catches the flare, but it must stay on the muscular belly and not migrate into the soft tissue that shapes the nostril contour. If the tip dips as the person smiles, a tiny dose to the depressor septi nasi near the columellar base evens the movement. This is a micro-adjustment. Too much and the tip loses its natural counter-rotation.

Asymmetry: reading and fixing the left-right mismatch

Faces are asymmetrical by default. In gummy smile cases, one alar base often rides higher, or the philtral column deviates. I begin by marking the higher side with a slightly more lateral injection point and, if needed, a fractional unit more than the lower side. For example, 1.5 units on the high side, 1 unit on the low side. If brow or midface dominance contributes to a crooked smile, I sometimes tie the plan to a small brow adjustment in a separate session. Think of it as tuning the whole instrument, not just a single string.

Symmetry checks benefit from slow-motion phone video captured at baseline and at two weeks. I look frame by frame for the moment of maximal smile, because still photos can miss timing differences between sides. Meticulous before-and-after muscle tests keep the process objective.

How forehead and glabellar mapping relates, indirectly

While the midface is the star in gummy smile correction, the upper face matters because we read emotion holistically. An aggressive frontalis treatment that flattens the brow while we refine the smile can make someone look distant or less engaged. I adjust forehead unit mapping and dosing to preserve lateral brow movement for patients who rely on expression in social or professional settings. The glabella gets balanced just enough to prevent frown lines from dominating when the smile softens. This orchestration of upper and midface treatments often determines whether the final look reads harmonious.

Dilution ratios and product handling

Toxin potency preservation and dilution consistency make subtle work repeatable. I store vials at recommended refrigerator temperatures, avoid temperature shocks, and reconstitute gently. For fine control in the midface, a concentration around 2 to 2.5 units per 0.1 mL gives me the best tactile feedback. If I need microdroplets, I will work even more concentrated so I can place 0.02 to 0.03 mL touches accurately. For patients with thin skin who bruise easily, smaller volumes reduce tissue distension and lower the chance of visible spread. The effect is not just about units, it is about how compactly those units are delivered to the target fibers.

Male anatomy, stronger elevators, and unit adjustments

Men often present with thicker, stronger facial muscles and wider bony landmarks. When correcting a gummy smile in a male patient, I assume a need for slightly higher units per point, then confirm during animation testing. The injection points can sit a few millimeters more lateral to capture broader fiber patterns, particularly in zygomaticus minor. Male smiles also tend to show distinct lateral action, so a single central approach under-treats. Again, the target is moderation: we aim to decrease gingival show without muting the masculine energy of the smile.

Risks, complications, and how to respond

Even with careful technique, rare issues occur. Over-relaxation can make the upper lip feel heavy or reduce tooth show to the point of looking “muffled.” This tends to improve as the toxin wears off, but you can sometimes counterbalance by increasing lateral smile support with the zygomaticus major unaffected areas or using a tiny amount of filler in the vermilion to restore outward roll. Do not add more toxin centrally if the lip is already heavy.

Unexpected asymmetry after day ten usually means one side absorbed or metabolized differently, or the injection landed slightly off plane. A 0.5 to 1 unit micro-correction on the stronger side typically evens it. If the nose feels restricted or the nostril shape changes, suspect migration. Reassure the patient about the temporary nature and avoid stacking more doses around the alar base.

Contraindications deserve respect. Patients with neuromuscular disorders, those on certain antibiotics that influence neuromuscular transmission, or those with a history of severe toxin sensitivity should avoid or defer treatment. A sober pre-treatment checklist trumps enthusiasm.

The role of preventative planning and long-term patterns

Some patients come in early, before the gummy smile really bothers them in photos. Preventative use in high-movement zones makes sense for individuals with hyperactive facial expressions, especially if their family photos reveal a pattern of gingival display. Low-dose, high-precision work trains the muscles over time. After three to six sessions, many patients need slightly less toxin to hold the same endpoint, as their smile arc adapts. This is not universal, but I see it often enough to plan intervals at 3 to 4 months initially, then stretch to 4 to 5 months for those who stabilize.

Repeated relaxation can lead to small, localized muscle atrophy. That may be a benefit for someone who prefers lasting reduction in elevator dominance, but it carries the risk of over-thinning in patients with fine tissues. I prefer conservative dosing over long horizons rather than large doses that swing the pendulum too far.

When to combine with other modalities

Sometimes, Botox alone cannot handle the structural part of the story. A very short upper lip at rest, altered tooth eruption, or vertical maxillary excess often needs dental or surgical input. In modest cases, a soft, micro-aliquot filler along the philtral columns and central vermilion can restore contour and reduce perceived gingival show by helping the lip evert. Sequence matters: correct the muscle pull first, then add filler two to three weeks later if the lip still looks thin. For patients with severe bruxism and masseter hypertrophy that flattens the midface and pulls balance downward, masseter reduction can indirectly improve facial harmony around the smile, but it does not directly treat a gummy smile. The point is synergy, not stacking treatments indiscriminately.

Precision workflow I rely on

- Assess animation in conversation, then in maximal smile, noting millimeters of gingival display medial and lateral, alar flare, and tip motion.
- Palpate and mark three key zones: alar base (LLSAN), lateral elevator (LLS), and lateral smile accent (zygomaticus minor), adjusting for asymmetry.

- Start with conservative microdoses, concentrated dilution, superficial plane, and careful spacing roughly 6 to 10 millimeters apart depending on facial width.
- Recheck at two weeks with slow-motion video. Micro-correct 0.5 to 1 unit where dominance persists. Avoid chasing total gum coverage on the first cycle.
- Plan maintenance intervals based on metabolism, activity level, and response, stretching timelines only after two consistent cycles.

Subtle but important edge cases

High-energy professionals who speak, laugh, and project all day often recruit elevators more strongly late in the day. I time their first follow-up near the end of their workday so I can see the muscles under load. Singers and wind instrumentalists require an extra-light touch around the orbicularis oris to preserve embouchure. In those cases, I avoid superficial perioral microdosing entirely until we know the elevator correction did not change function.

Thin-skinned patients bruise more easily. I cool the skin lightly, avoid multiple passes through the same track, and apply brief pressure, not rubbing. If lymphatic swelling occurs after treatment, it usually resolves in a day or two. Persistent swelling suggests either a bruise or a superficial bolus that needs time to dissipate.

If a patient exercises intensely, particularly with heat exposure or long endurance sessions, I warn them about slightly shorter longevity. It is not universal, but the pattern shows up often enough to matter. We adapt by micro-adjusting dose, not by overfilling the area.

How gummy smile work fits within whole-face planning

Most patients who come for this correction care about proportion. Once we soften the gingival show, the eyes and midface carry more of the emotional message. I balance that by keeping crow’s feet treatment subtle to avoid cheek flattening, letting some lateral crinkle remain. If we also treat the glabella, I maintain a small lift at the medial brow to avoid a stern look that could clash with a now-easier smile. The chin and mentalis deserve attention in patients with dimpling or pebbled texture. A microdose there reduces visual noise below the mouth so the smile reads cleaner. These are small touches, but in aggregate they shape how the face communicates.

What a realistic result looks like

Expect a reduction of 2 to 4 millimeters of gingival display in most cases, with the best balance around a natural tooth-to-gum ratio that keeps the smile bright. The upper lip should still evert gently and move in sync with the cheeks. The nasal base should rise less, with controlled flare. Speech should feel identical, and straw use should remain easy. If any of those functions change, the dose was too high or the plane was off. Good work is invisible when static and persuasive in motion.

A brief word on expectations and communication

The satisfaction curve rises when we set precise goals. I ask patients to choose their favorite smile photo, then we work toward that proportion, not a generically “smaller” gum line. If the patient wants full gum coverage, I explain the trade-off: more toxin risks a dull smile and altered lip mechanics. Most people prefer a balanced midpoint once they understand the dynamics. Photographic documentation at rest, soft smile, full smile, and speech frames supports clear dialogue and helps fine-tune future sessions.

Final perspective from the treatment chair

Gummy smile correction with Botox rewards restraint, planning, and observation. The technique thrives on careful dosing strategies tailored to the dominant elevator pattern, clean injection planes that respect diffusion, and deliberate follow-ups where half a unit can make the difference between good and exceptional. I have seen patients rediscover the joy of wide, unguarded smiles after spending years hiding them behind a hand. The outcome is not about looking “done.” It is about rhythmic movement and proportion, the kind that makes a face look relaxed in photos and authentic in motion. When you treat the smile as a coordinated system rather than a single line to erase, the results hold and the person in the mirror still feels like themselves.