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Welcome to the third issue of the *Caring For Your Skin* Newsletter, that I write biannually to help keep my patients informed of the latest skin care advice and advances. In this issue, I address:

- 1) Latisse<sup>TM</sup>, a new product that induces eyelashes to grow longer, thicker and darker
- 2) Botox alternatives coming soon
- 3) Fractional CO<sub>2</sub> laser resurfacing a safer alternative to older resurfacing techniques



Latisse<sup>TM</sup> is the brand name for bimatoprost 0.03% eye solution. It is the same active ingredient in Lumigan, an eye medicine made by Allergan that is used to treat glaucoma patients. When the glaucoma eye drops were initially used some patients noticed that their eyelashes grew longer, thicker and darker. Allergan then developed Latisse<sup>TM</sup> as a safer alternative to take advantage of this side effect for patients that have under developed eyelashes.

Latisse<sup>TM</sup> is a prescription medication that is applied once daily to the upper eyelid skin at the base of the eyelashes. Patients usually note improvement within the first two months of use, and maximal results usually occur by the fourth month. Continued use is needed to maintain the effects. The eyelashes will return to their former state weeks after stopping Latisse<sup>TM</sup>. The \$120 Latisse kit comes with 60 applicators and Allergan recommends using a new applicator for each eye daily. Some patients use one applicator for both eyes and note that there is enough Latisse to last 2 months. Once results are achieved, some patients are using Latisse less than every day to try to maintain the effects at a lower cost. Below are photos of two patients from Allergan's Latisse<sup>TM</sup> web site (<a href="https://www.latisse.com">www.latisse.com</a>). Note the dramatic increase in thickness and length, and darker color of the eyelashes after 4 months.





How safe is Latisse<sup>TM</sup>? The active ingredient bimatoprost has been used for glaucoma patients and has been noted to cause permanent darkening of the eye color when applied as eye drops, <u>in</u> the eye. This has not yet been reported when Latisse<sup>TM</sup> is applied to the skin at the base of the upper eyelashes, although reversible darkening of eyelid skin can occur. Approximately 4% of patients using Latisse<sup>TM</sup> have reported an itching sensation in the eyes and/or eye redness that may improve with continued use. Latisse<sup>TM</sup> less commonly can cause skin darkening, eye irritation, dryness of the eyes, and redness of the eyelids. You should inform your health care providers that you are using Latisse<sup>TM</sup>, particularly if you have eye pressure problems (glaucoma). If you have eye pressure problems, only use Latisse<sup>TM</sup> under close observation by your eye care specialist. If you are interested in using Latisse<sup>TM</sup>, make an appointment for a brief consultation with me. The cost of the consult is \$50. The cost of the kit, if purchased at the conclusion of the consultation is \$99. Subsequent kits are \$109 each, or two for \$199. The kits can also be purchased at pharmacies. I recommend an eye exam that includes a test for glaucoma within a year before starting Latisse, and after the first 4 to 6 months of use.







Botox® is the brand name of the purified protein that is isolated from Clostridium botulinum, the bacteria that causes botulism. The purified protein cannot cause the infection but is well suited for multiple medical and cosmetic uses. In dermatology I use it primarily for treating wrinkles and excessive perspiration, and less commonly for other skin conditions. It is also used for many medical conditions including uses for headaches and neuromuscular conditions (cerebral palsy, multiple sclerosis, Parkinson's disease, Bell's palsy, stroke victims, vocal cord disorders, and neck, bladder, throat & eyelid spasms). Botox® originally was approved by the U.S. Food & Drug Administration (FDA) for muscle spasm use in 1989, and although used for cosmetic use "off label" since then, it was not FDA approved for cosmetic use until 2002. In Europe and other countries other botulinum toxin type A products made by other companies have been available for years. Some of these other botulinum toxin type A products will soon become available in the U.S. including:

**Reloxin**<sup>®</sup> - should be approved by the FDA sometime this year. It is currently approved for use in over 65 countries under the name Dysport. Reloxin<sup>®</sup> is purified under different conditions than Botox<sup>®</sup> and some clinical trials to date have shown similar effects compared to Botox<sup>®</sup>.

**PurTox**<sup>®</sup> will likely be the third botulinum toxin type A product to be approved by the FDA, probably sometime next year. It is purified differently than Botox<sup>®</sup> and Reloxin<sup>®</sup>, but will likely have very similar effects.

**Xeomin**<sup>®</sup> is most similar to PurTox<sup>®</sup>. It is currently used in Europe for treating muscle spasms of the eyelids and neck. It is also approved for cosmetic use in Argentina. It has been shown to work similarly to Botox<sup>®</sup>, in terms of safety, duration of effects and potency.

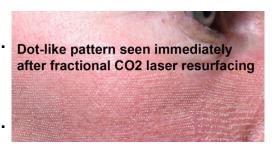
**No more needles??** - A company in California (Revance Therapeutics) is developing a form of botulinum toxin type A that might work without requiring a needle for injection. Early results suggest that the topical application of a specially formulated gel may be effective in decreasing movement in the crows feet areas and also decrease under arm perspiration.

**Other forms of botulinum toxin** - There are seven types of botulinum toxin, lettered A to G. The above discussion involved only type A, the type found in Botox<sup>®</sup>. However, botulinum type B toxin Myobloc<sup>®</sup>/NeuroBloc<sup>®</sup> (Solstice Neurosciences) is also approved for use in the US. Unfortunately Myobloc<sup>®</sup>/NeuroBloc<sup>®</sup> is not as long lasting as Botox<sup>®</sup>, although its onset of action is faster.

**Conclusion** – Botox treatments are one of the safest and most highly satisfying cosmetic treatments I offer. As more Botox<sup>®</sup> competitors come to market the cost of treatment will become less expensive, and for consumers this is very good news indeed! This is already a reality in European countries.

**Promotions:** We are currently offering a \$50 credit towards cosmetic Botox treatment of one or more areas to patients that have not received treatment in over one year. We are also offering ½ off full face microdermabrasion (now \$45) until July 1<sup>st</sup>. We continue to offer free IPL photorejuvenation and hair removal consultations. See up-to-date promotional information at <a href="www.rutlandskin.com">www.rutlandskin.com</a>.

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•••••	Fractional CO <sub>2</sub> laser resurfacing
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Over the past several years there have been a number of new developments in resurfacing techniques. Years ago dermabrasion (not microdermabrasion) was a way to smooth out scars and wrinkles and other skin imperfections. It involved physical removal of the upper portions of the skin with a mechanical sander type device. Recovery time was prolonged and there were risks of scarring and abnormal pigmentation. In the 1990s carbon dioxide (CO<sub>2</sub>) lasers revolutionized resurfacing by being more precise and providing better outcomes. However recovery time was long and risks of scarring and pigment abnormalities remained. Less aggressive lasers were later developed but they did not provide nearly as dramatic improvement and required multiple treatments that are more costly.

More recently lasers have been developed that only treat a portion of the skin in a dot like fashion so that skin in between the dots can serve as a reservoir of skin cells to provide much quicker healing with little risk of scarring or pigment changes. Of all the different types of fractionated lasers currently available, the  $CO_2$  fractional lasers are thought to produce the most dramatic results. Fractional  $CO_2$  lasers are used to smooth out skin imperfections, erase brown age spots while providing modest tightening of the skin. These lasers can help improve the appearance of scars, stretch marks, fine wrinkles, large pores, and droopy eyelids. It is claimed that only one treatment is needed for most treatments, though scars often require more. Most patients recover within a week with facial treatments, and within two weeks for treating other areas (neck, hands, etc.). Fractional  $CO_2$  treatments may provide results almost as good as traditional full-surface  $CO_2$  laser with far less downtime and risk.

Fractional  $CO_2$  laser treatments are much less uncomfortable than conventional full surface resurfacing. A topical anesthetic is typically used, and sometimes an injectable anesthetic agent or an oral medication is prescribed, to minimize pretreatment anxiety, and (or) discomfort. After treatment discomfort is sunburn-like, lasts 1 to 3 hours and usually well controlled with ice and medications such as Tylenol<sup>TM</sup> or Advil<sup>TM</sup>. There is redness, and crusting for a few days, followed by peeling. Some redness can last for weeks is easily concealed with makeup, if needed. Most patients return to work within five to 6 days after a facial procedure. Fractional  $CO_2$  laser's effects should last for several years but don't halt the inevitable aging process. Repeat treatments are sometimes required for additional improvement.

I have used older non-fractionated lasers for resurfacing when I was at the University of North Carolina. I have tested some of the newer devices since coming to Vermont, including nitrogen plasma resurfacing that I felt was not very impressive. More recently I have tested two different fractional  $CO_2$  lasers and am waiting to see how my treated patients do. If my test patients and I are both happy with the results, and my experience shows this treatment to be very safe, as others have reported it to be, then I will likely add this service to my practice. Below are several photos of patients I have recently treated with a fractional  $CO_2$  laser.









In closing, I hope you enjoyed this issue of the *Caring For Your Skin* Newsletter. If you are not on the e-mailing list and would like to receive future newsletters via e-mail, or would like to have a particular topic covered in a future newsletter, e-mail your request to <a href="mailto:C4YSkin@gmail.com">C4YSkin@gmail.com</a>.

Hope you have an enjoyable spring & summer.... and don't forget the sunscreen & vitamin D!

