



# Young As You Look

WINTER  
2002

NEWSLETTER

## MESSAGE FROM DR. DON GROOT



**DR. DON GROOT**  
DERMATOLOGIC & LASER SURGERY  
Clinical Professor of Medicine  
University of Alberta

**Baby boomers are turning 50 at the rate of one every 7 seconds and most of us in this category want to look as good as we feel.**

You work out, eat healthy foods, and take good care of yourself so that you can continue to be active and productive even as you get older. Often, especially if you have experienced a lot of sun exposure, the benefits of your efforts may show in your body, but not on your face. The mirror does not reflect how you feel inside.

The good news is that there is a lot that you can do to minimize the impact of the signs of aging on your skin.

We have devoted this newsletter to discussing wrinkles – where they come from, how they can be prevented and what can be done to minimize their impact on our appearance as we age.

If you have any questions about what you read or are interested in assessment of your skin we offer free consultations and welcome your visit and your questions.

# Wrinkle Causes, Wrinkle Cures

## Wrinkle Causes

**Wrinkles are simply folds and creases in the skin resulting from a reduction and deterioration of the building blocks of the skin known as collagen and elastins.**

**Collagen is a natural protein found throughout your body. The word “collagen” is derived from the Greek word for “glue” – because collagen is similar to glue that binds your cells together.**

Throughout your life collagen provides your skin with essential structural support for new cell development. Collagen fibres form a framework that makes your skin strong and healthy. This collagen framework is crucial to the youthful texture and resiliency of your skin. As your natural collagen production diminishes over time, your skin's natural flexibility weakens, causing a breakdown of the collagen structure which contributes to aging skin.



A number of factors contribute to the formation of wrinkles:

**Sun Damage:** Exposure to ultraviolet light from the sun and other sources such as tanning beds, are the prime reason why we get wrinkles. The Ultraviolet B (UVB) rays and the longer Ultraviolet A (UVA) rays of the sun both penetrate into the dermis of the skin causing the breakdown of collagen and the formation of wrinkles, as well as other signs of sun damage: dilated blood vessels, pigment changes, texture changes, and scaly patches.

**Muscle Pull:** Dynamic or muscle pull wrinkles are caused by the repetitive contractions of delicate underlying facial muscles, which contributes to the deterioration of collagen in these areas of tension. The common areas where muscle pull wrinkles tend to form are between the eyebrows, around the eyes and smiles line extending between the nose and mouth. The more emotion you show the deeper these wrinkles and lines are likely to be.

from page 1

## Wrinkle Causes

**Gravity Changes:** Young skin, because of its elasticity, can withstand gravitational pull. With age, degeneration of the collagen and elastins in the dermis makes the skin more susceptible to the pull of gravity causing it to sag. Droopy upper eyelids and bags under the eyes and jowls are common examples of the impact gravity can have on the face.

**Fat Loss and Redistribution:** Loss of the fat cushion in the third layer of the skin or redistribution of the fat within this cushion often occurs in the fourth to sixth decade of life. A re-draping of the skin results, with furrows and creases appearing on the forehead, around the eyes and on the chin and neck. This is compounded by the pull of gravity.

**Sleep Creases:** Vertical lines on the forehead and the cheeks can be caused by habitually pressing the face into a pillow night after night while sleeping. As the skin loses its elasticity it does not snap back in the morning and these lines become permanent.

**Heredity:** We inherit a predisposition for the deterioration of the skin's building blocks, the fibrous protein known as collagen found in the dermis. If you look at your parents and grandparents, you will have an idea of the pattern of wrinkling you might expect to see in yourself. Unfortunately we cannot choose our ancestors so we cannot prevent this predisposition to wrinkling.

## Wrinkle Cures

### PHOTO AGING

As the saying goes, an ounce of prevention is worth a pound cure. Wear sunscreens of an SPF of 30 or more every day, wear protective clothing, stay out of the sun and stay away from tanning beds.

Photo aging affects the quality of the skin (texture changes, fine wrinkles, telangiectasia, and pigment changes) and responds well to resurfacing techniques. Resurfacing techniques vary from mild to aggressive and the selection of the right technique is determined by the nature of the damage being treated and the desire of the patient. Resurfacing techniques are often used in combination to achieve a synergistic benefit.

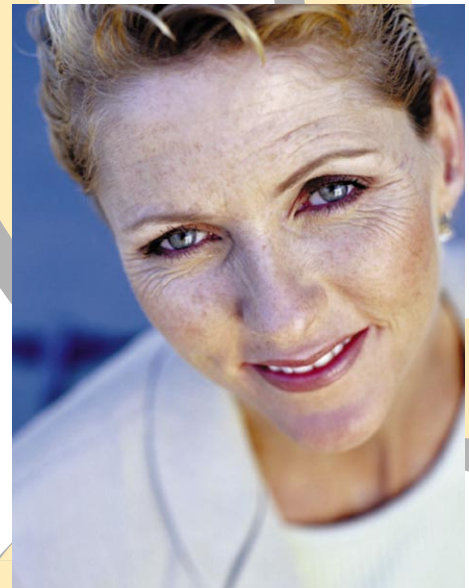
All of these techniques have their limitations, risks and periods of cosmetic disability. In most cases the rewards are substantial. Normally the more aggressive resurfacing options offer the greatest likelihood of improvement. On the other hand, more aggressive options are accompanied by longer periods of recovery.

### Mild Therapies Medicated Topical Creams

A combination of tretinoin, alpha-hydroxy acids, hydroquinone and/or kojic acid in creams when used over a long period of time will help to clarify the skin, even out irregularities in pigmentation, decrease wrinkles, soften fine scars, and generally improve the complexion. The use of these creams is a foundation for skin care and is often recommended in combination with other resurfacing methods. The key is to find the appropriate antioxidant cream for your particular skin.

Often the potency of creams that contain alpha-hydroxy acids is neutralized by the delivery vehicle in which they are mixed. **Dr. Groot** has created medicated formulas which maintain their potency despite the base they are mixed in. These formulas contain varying concentrations of tretinoin, alpha-hydroxy acids and bleaching agents to address varying stages of photo-aging from mild to more severe. These formulas are compounded at

Crestwood Apothecary (780-455-6979), so that they are fresh. This ensures that the fruit acids are not neutralized, leaving them fully active and potent. These creams are only available by prescription.



### Moderate Therapies Micro-dermabrasion

The process of cell renewal is a natural process that slows as we age. Exfoliating the superficial dead cells through micro-dermabrasion increases the production of new skin cells. By gently showering the skin in a controlled fashion with aluminum oxide crystals blackheads are loosened, whiteheads are drained, hyperpigmentation may be lightened, epidermal wrinkles may be softened, and enlarged pores become less prominent. A micro-dermabrasion leaves the skin smooth and clean with mild redness. A number of sessions are required before improvement, if any, is noted. The period of recovery after a treatment is minimal.

### Non-ablative Laser Resurfacing

Non-ablative laser resurfacing involves the gentle application of a long wavelength of laser light. This treatment helps to rejuvenate the skin by reducing fine wrinkles, evening out irregular pigmentation, smooth-

2  
Young As  
You Look

# Wrinkle

ing out texture changes and reducing enlarged pores. While a micro-dermabrasion is a form of aggressive exfoliation where changes to the skin occur at a superficial level, non-ablative laser resurfacing works just below the surface of the skin. It does not go deep enough to ablate the skin, however, it will help to stimulate collagen realignment, tighten the elasticity of the skin, decrease vascular changes, remove superficial pigment and even out scarring.

We use three levels of non-ablative resurfacing. The selection of the correct level for any given individual is made based on the type and severity of problem being addressed.

**The Genesis diffuse non-ablative laser resurfacing** technique utilizes the Genesis laser in a diffuse manner over the entire face. This technique is often used synergistically in combination with medicated creams and micro-dermabrasions in a program we refer to as the New York Triple Rejuvenation Program.

**The Genesis targeted non-ablative resurfacing** technique utilizes the Genesis laser in a targeted manner to specific areas of concern such as fine wrinkles around the eyes and lips.

**The Q-switched 1064 non-ablative laser resurfacing** technique utilizes the Versa-Pulse laser in a more aggressive fashion to target deeper wrinkles and scarring. Generally it is used over the entire face but can be used in a targeted fashion for particular areas of concern as well.

Repeat sessions may be necessary to achieve maximum benefit especially with the Genesis techniques. The recovery period from non-ablative laser resurfacing is short. After a treatment, the skin may vary in color from pink to red. This will gradually fade within 48 hours, although the Q-switched 1064, being the more aggressive of the three techniques, may take a few more days of recovery time.

### **Advanced Therapies** **Ablative Laser Resurfacing Technique**

Severe damage due to photo-aging requires more aggressive solutions. The carbon dioxide laser is used under general anesthesia to ablate or remove the superficial layers of the skin in order to reach deep into the

dermis to stimulate collagen production and realignment. The results are very dramatic. The post operative recovery time however is long. Patients are usually require ten days to recover and they are pink for three to six months afterwards. Ablative laser resurfacing is the most advanced care for severely damaged skin (texture changes, irregular pigmentation, deep wrinkles), and scars. Often other components of photo-aging such as dilated blood vessels and pigmented lesions are also present and are treated with additional laser systems.

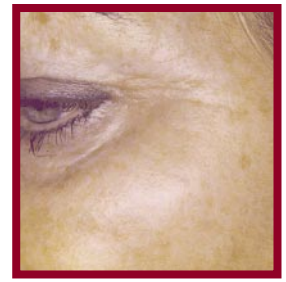
### **Combined Therapies**

Many patients start with the milder treatments and eventually move on to the more effective, aggressive treatments for aging changes. One treatment does not preclude the use of others. Many patients begin with the medicated creams, then move through the spectrum of micro-dermabrasions, non-ablative laser resurfacing and then ablative laser resurfacing at a later date as aging changes continue to progress. Some choose the synergistic benefits of combined therapies such as the New York Triple Rejuvenation Program. Others are happy to stay with the least aggressive options. What might be beneficial for one person may not be for another or may not be optimal at a certain period of time in their life. Whatever treatment is chosen, it is important to reflect on the procedure, alternatives, risks and limitations, and the experience of the surgeon.

### **The New York Triple Rejuvenation Program**

The New York Triple Rejuvenation Program is a multi-faceted, non-invasive process designed for rejuvenation of the face, neck and hands. All aspects of the program serve to improve the problems of the skin associated with photo-aging, including uneven texture, pigment changes, and fine wrinkles. Tired looking skin that is porous, cloudy, and sallow is revitalized.

This program utilizes a combination of rejuvenating power of the medicated creams, micro-dermabrasions, and the non-ablative laser therapies. It has been found that when these treatments are used together the effect is synergistic; that is, the whole is greater than the sum of the parts.



**Ablative Laser Treatment**  
BEFORE



**Ablative Laser Treatment**  
AFTER



**New York Triple Rejuvenation Program**  
BEFORE



**New York Triple Rejuvenation Program**  
AFTER

# Cures

# Wrinkle Cures

## MUSCLE PULL WRINKLES

BOTOX and soft tissue implants (Collagen, Hylaform) are often used in combination to soften the impact of muscle pull wrinkles.

### Botox

Now, thanks to a new use for an FDA approved drug called BOTOX, dynamic lines over the forehead (frown lines) and around the eyes (crow's feet) can be dramatically softened.

BOTOX is a purified protein produced by the Clostridium botulinum bacteria. Using a tiny needle, a very small amount of BOTOX is injected, very precisely, into the target muscle. The toxin blocks impulses from the nerve to the tiny facial muscles that are responsible for the deep muscle pull creases. Consequently the muscles relax so that the undesirable creases gradually fade away. After treatment, the overlying skin remains smooth and unwrinkled while the untreated facial muscles contract in a normal fashion, allowing desirable facial expression to be unaffected. A single treatment will last anywhere from 2 to 11 months.

## Soft Tissue Implants

Soft tissue implants (Collagen, Hylaform) replace and restore damaged collagen, so that creases are smoothed and youthful appearance is restored. When a small amount of collagen is injected under the surface of your skin, your own natural collagen framework literally gets a boost. The new collagen strengthens your skin's weakened collagen framework. The injection fills out the targeted wrinkle, line or scar until its surface is level with the surrounding skin – lines and scars practically vanish.

Soft tissue implants are usually injected into the creases which form between the corners of the nose and mouth and are frequently used in combination with BOTOX to combat dynamic or muscle pull wrinkles.

## GRAVITY CHANGES, FAT LOSS AND FAT REDISTRIBUTION

In the early stages of gravity and fat changes laser resurfacing may effectively tighten up the collagen in the skin thereby minimizing the effects these shifts have on the skin. With advanced changes re-draping procedures such as blepharoplasties and face lifts need to be considered.



**Botox**  
BEFORE

**Botox**  
AFTER



**Collagen**  
BEFORE

**Collagen**  
AFTER

SERVICES WE OFFER

### Liposuction

Tumescent  
Ultrasonic

### Laser Surgery

Wrinkles  
Facial Veins  
Birthmarks  
Scar Revision  
Tattoos  
Moles & Brown Spots  
Skin Cancers

### Facial Rejuvenation

Laser Resurfacing  
Laser Eyelid Lifts  
Botox  
Soft Tissue Implants  
Collagen Replacement  
Chemical Peels  
Mega Peels

### Leg Veins

Sclerotherapy  
Laser Removal

### Hair

Laser Removal  
Transplants

## Liposuction Gives a Lasting Impression

*Liposuction is like a diamond – it lasts forever. Diamonds are unique and so are you. You deserve to look and feel your best and liposuction will help you achieve your goals.*

*A consultation is free and confidential and provides you with an opportunity to observe a video and ask any questions you may have about the procedure.*



BEFORE

AFTER

## Book Now for Your Holiday BOTOX and/or Collagen Treatments

**\$50.00** off each syringe of **BOTOX** or **Collagen** received between Monday, November 18, 2002 and Friday, January 17, 2003.

## HOURS OF OPERATION

**Did you know that we are open evenings and weekends?**

### Monday to Friday Daytime:

All Consultations and Treatments

### Thursday & Friday Evenings:

Non-Ablative Resurfacing Treatments (micro-dermabrasions and laser) and Laser Hair Removal

### Saturdays:

Non-Ablative Resurfacing Treatments (micro-dermabrasions and laser), Laser Hair Removal and Hair Transplants

PRODUCED BY:  
**InForum**

EDITED BY:  
**Patricia Johnston**

**4** Young As You Look

## TO OBTAIN MORE INFORMATION

Call us for more information or a personal consultation at (780) **482-1414**.

Our consultations are confidential and free.

**VISIT OUR WEBSITE:**

[www.drroot.com](http://www.drroot.com)

Stony Plain Road

102 Avenue

Groot *DermaSurgery* Centre

Suite 200  
9670 - 142 Street  
Edmonton, Alberta  
T5N 4B2

142 Street

96 Avenue

N