ESSENTIALS OF THREAD LIFT TREATMENT

CBAM Aesthetic Mastery Series

PRINCIPAL AUTHORS:

Dr. Reza Akef

Dr. Mohsen Talani

PRINCIPAL AUTHORS:

Dr. Reza Akef

Dr. Mohsen Talani MD, Anatomist

CO-AUTHORS:

Dr. Ramin Rezaei Nasab. MD

Dr. Mehrsa Askari. MD

ABOUT AUTHORS

Dr. Reza Akef is a highly experienced and respected cosmetic physician, with over 15 years of experience in teaching and practicing cosmetic medicine. He is currently the Assistant Professor at McMaster University and the Chairman of the Canadian Board of Aesthetic Medicine (CBAM), where he shares his knowledge and expertise with other healthcare professionals to provide the best care for their patients.

Dr. Akef is board certified by the College of Family Physicians of Canada in both Family and Emergency Medicine. Additionally, he is deeply involved in interventional pain practice cooperation for the treatment of Migraines, chronic pain, TMJ, Myofascial pain, and Fibromyalgia. He is a leading cosmetic physician and an internationally recognized specialist in non-surgical cosmetic procedures.

Dr. Akef is dedicated to understanding his clients' concerns and creating personalized treatment plans that meet their needs and goals. He is committed to thoughtfully and strategically creating individualized combinations of leading, safe treatments that exceed client expectations. He is also the founder of Angel Gloss spa in Toronto, an established, leading destination for non-surgical cosmetic procedures for individuals seeking leading physicians with proven experience, the latest technology, and cutting-edge techniques.

Dr. Akef is actively involved in multiple training courses, webinars, and conferences all around the world, including prestigious international conferences such as IMCAS, AMWC, and Dubai Derma. He participates as a speaker at these events and is always looking to stay up to date with the latest developments in the field of cosmetic medicine.

Mohsen Talani is the Director of CBAM. He has over 18 years of experience teaching anatomy in Canada and internationally to students and healthcare practitioners in different fields of medicine such as physicians, dentists, nurses, chiropractors, and physiotherapists.

After graduating from medical school at a young age, he became a medical doctor in his home country, Iran, and practiced in the field of emergency medicine. While pursuing his Master's thesis in neuroscience at McGill University, he discovered his passion for teaching. Since then, he has been working in the field of medical science education, with a focus on anatomy.

He strongly believes that with the rapidly growing aesthetic industry, all practitioners should have a profound knowledge of skin basics, fat compartments, muscles, blood vessels, and nerves, in order to provide safe and effective care to clients and prevent or minimize post-treatment complications linked to lack of anatomy knowledge.

He is currently training healthcare practitioners who seek to have a deep knowledge of anatomy. He incorporates fun, innovative, and easy-to-understand methods of teaching in all of his classes, guest lectures, and presentations. Additionally, he supervises the cadaver lab dissections and hands-on practicals.

TABLE OF CONTENTS

CBAM PUBLICATIONS
Canadian Board of Aesthetic Medicine

TABLE OF CONTENTS

CBAM PUBLICATIONS
Canadian Board of Aesthetic Medicine

TABLE OF CONTENTS

CBAM PUBLICATIONS
Canadian Board of Aesthetic Medicine

TABLE OF CONTENTS

CBAM PUBLICATIONS
Canadian Board of Aesthetic Medicine

TABLE OF CONTENTS

CBAM PUBLICATIONS
Canadian Board of Aesthetic Medicine

TABLE OF CONTENTS

CBAM PUBLICATIONS

Canadian Board of Aesthetic Medicine

Chapter 1:
Introduction to Thread Lifting

CBAM PUBLICATIONS
Canadian Board of Aesthetic Medicine

1.1 Introduction to Thread Lifting

1.1.1 What is Thread Lifting?

Thread lifting is a **minimally invasive aesthetic procedure** that addresses facial and body skin laxity by **mechanically lifting soft tissues** and stimulating **collagen production** through the strategic placement of absorbable threads under the skin. The treatment provides a **natural-looking rejuvenation** without the need for surgical excision, extensive downtime, or general anesthesia. It serves as an intermediate solution between non-invasive treatments (like fillers and skin tightening devices) and surgical facelifts.

Fig1. Thread Lifting can cause collagen production in skin

Fig2. Thread Lifting is one of the innovative treatments for facial rejuventaion

This technique has become an essential part of modern aesthetic medicine, offering patients a safe, office-based procedure with visible yet subtle results. As newer thread materials and advanced techniques have evolved, thread lifting has transitioned from a controversial procedure to a widely accepted and evidence-based treatment modality.

Core Principles of Thread Lifting

1. Mechanical Suspension

Specialized threads—usually barbed, cogged, or cone-shaped—are introduced into the **subcutaneous fat layer** or **superficial musculoaponeurotic system (SMAS)** using a cannula or needle. The barbs or cones anchor into the tissue, and when traction is applied, the thread **lifts sagging skin**, restoring youthful contours in areas like the cheeks, jawline, and brows

Fig 3. Mechanical Suspension of the face through Thread lifting

2. Biostimulation

As the threads biodegrade, they induce a **controlled inflammatory response**, stimulating **fibroblasts** to produce new collagen (types I and III), elastin, and hyaluronic acid around the thread tracks. This response continues even after the thread is absorbed (over 6–18 months, depending on the material), leading to:

- Firmer skin
- Improved elasticity
- Enhanced hydration and dermal density

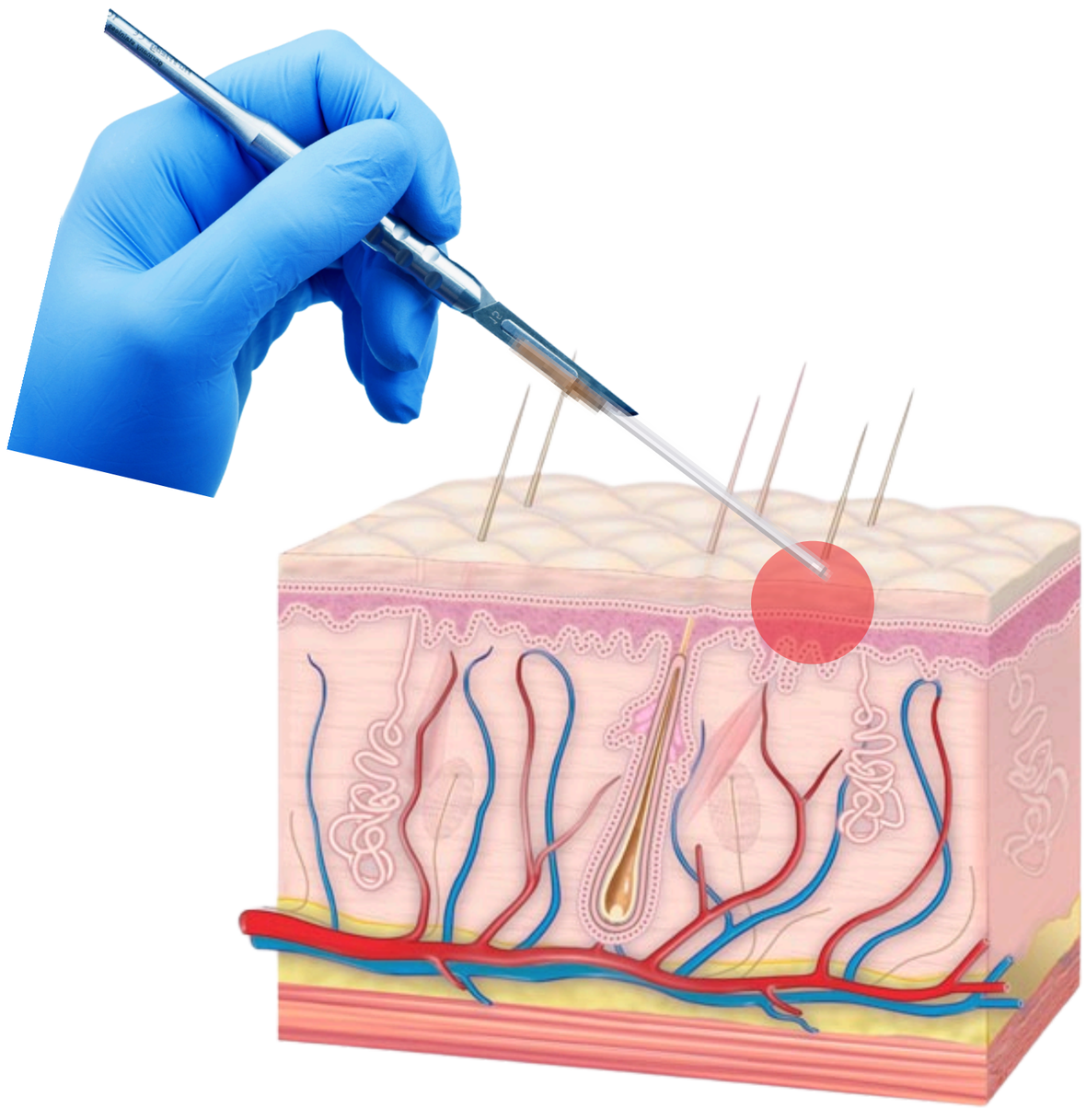

Fig 4. Inflammation Caused by Thread lifting leading to skin rejuvenation

Thread Lifting Materials

The threads used today are **absorbable** and made from **biocompatible polymers**, which gradually break down and are resorbed by the body:

Material	Absorption Time	Biostimulatory Effects
PDO (Polydioxanone)	6–8 months	Moderate collagen stimulation
PLLA (Poly-L-Lactic Acid)	12–18 months	High collagen stimulation
PCL (Polycaprolactone)	18–24 months	Strong biostimulatory and elastin-inducing effects

Table 1. Comparison between different types of Threads and their Absorption time and Bio-stimulatory Effects

Each material has specific clinical indications based on the desired **longevity**, **lifting power**, and **degree of skin rejuvenation**.

Clinical Applications

Thread lifting is suitable for both the **face** and **body**, and has applications in the following areas:

Face:

- Midface ptosis
- Nasolabial folds and marionette lines
- Jawline definition (jowls)
- Neck laxity
- Brow ptosis (“fox eye” or cat eye lift)
- Periorbital area

Body:

- Loose skin in arms (bat wings)
- Abdomen
- Inner thighs
- Buttocks lift
- Knees
- Breasts

Fig 5. Thread lifting can be used in body conturing

Advantages Over Surgical Facelifts

Thread lifting offers several benefits compared to more invasive options:

- Threads are placed along predetermined vectors to restore youthful orientation of soft tissues.
- This repositioning corrects gravitational descent and contour irregularities

Aspect	Thread Lift	Surgical Facelift
Invasiveness	Minimally invasive	Highly invasive
Anesthesia	Local	General or sedation
Scarring	Minimal (needle entry points)	Incisions required
Downtime	1–3 days	2–4 weeks
Results	Subtle and natural	Dramatic, longer-lasting
Cost	Lower	Significantly higher

Table 2. Comparison between Thread Lifting and Surgical Facelifts

This makes thread lifting an **attractive option for patients in their 30s to 50s** who are not yet ready for surgery or are looking for a lighter intervention with faster recovery.

Mechanism of Action

The dual mechanism behind thread lifting makes it unique among aesthetic treatments:

Immediate Lift

- Achieved by the mechanical traction of barbed or cogged threads.

Delayed Regeneration

- Fibrotic encapsulation occurs along the thread path, laying down collagen.
- The healing process improves dermal quality, tightens the skin, and enhances long-term results.
- TGF-β (Transforming Growth Factor Beta) and other cytokines play a role in this neocollagenesis.