COG THREAD TYPES AND COMPLICATIONS

COG THREAD:

Cog PDO thread includes barbs, which cling to tissues for lifting effects when added.PDO COG threads have the potential to re-define facial contours and induces collagen production.

The treatment forms part of an integrated support structure for the tissue of the face by encouraging natural collagen synthesis with immediate results that peak at 6 months and last between 2-3 years.

The barbed threads improve facial appearance by immediately lifting & tightening. In the coming months, they will also encourage the production of new collagen in the skin to add volume a rejuvenate skin. Ideal candidates will typically be aged 45+.

Based on the direction of these spikes, cog PDO **polydioxanone** thread is categorized as

- **PDO uni-directional cogged thread,**
- **PDO Bi-directional cogged thread,**
- **PDO Mluti directional cogged thread.**

- Cog threads are essentially mono threads with barbs to hook to the underside of the skin.

- The barbs form a support structure that lifts the sagging tissue.
- Unlike mono threads, cog threads do not need anchoring points.
- Collagen formation can also occur around the threads and their barbs. Cog threads are most effective for jawline lifting and slimming.
- COG Threads are used for the lifting of soft, sagging facial tissue. They are also are used for skin rejuvenation and wrinkle treatment. Once inserted, COG Threads will be absorbed by the body over time, typically around 6 to 8 months. Due to increased collagen production, results can up to 12 to 24 months. As the suture absorbs in the body, it promotes the production of collagen and elastin in the skin. Using a non-incision method via a needle or cannula, the COG Threads procedure is minimally invasive and generally has a fast recovery time.

The thread, when inserted to a needle, will form a V-shape with an inner half inserted in the caliber of the needle and the other half outside. After inserting the needle or cannula, the thread will then remain intact with the tissue upon the removal of the needle or cannula.

Needle thicknesses of 18 to 31 gauge and threads with varying length and thickness are available. Appropriate thread span was selected depending on the epidermis length of the insertion area.

Blend of cog and twin threads was used for rejuvenating and lifting purposes in all patients.

Complications:

skin dimpling: These depressions were caused by the cogs of threads. The cogs were not strong. Manual therapy was applied on her face to release the tension of cog threads in the direction opposite that of placement

Discomfort and Pain: One of the top most common complaints is discomfort and pain. While minimally-invasive, thread lift procedures are not entirely pain-free.

Bruising, Swelling and Soreness: post-procedural bruising, swelling and soreness.

Patient Dissatisfaction: Similar to the classification of discomfort, pain, bruising, swelling and soreness, some studies do not define patient dissatisfaction as a complication, as this is often attributed to the discrepancy between patients' expectations and actual results.

Hematoma: In rare cases, patients may develop hepatoma when a performing practitioner accidentally injure/damage the wall of a blood vessel causing blood to seep out into the surrounding area during the procedure.

Infection: Another possible complication that may arise from the performing of a thread lift procedure is infection. Despite it being uncommon, infection associated to the procedure can occur.

Facial Asymmetry: Facial asymmetry is another possible complication that can arise from the performing of thread lift. Facial asymmetry can be caused by various factors such as the use of anaesthetic, inherent facial asymmetry, and/or inadequate lift in one side.

Protrusion, Extrusion and Migration of Threads: Protrusion, extrusion and migration of threads, if any, are often than not due to thread barbs being weak or when an inserted thread overlays an area of aggressive animation.

https://dermamodels.co.uk/pdo-cog-thread/

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7339253/

https://zenodo.org/record/1127579/files/10005867.pdf

https://www.skinrevival.com.au/injecting/bio-threads/

https://www.researchgate.net/publication/330154994_Technique_Using_Cog_Threads_Based_on_Pinch_Anatomy