Sinus Lift. Don’t Dream It: Do It!

By Dr. Dominique Caron, UAE

Do you know you are about to perform your self your next sinus lift procedure? Once it is done, you will wonder why you have been waiting for so long. The issue that often fails is: one, two, three teeth missing, framed by no tooth, weak teeth, living teeth...

Waiting for so long. The issue will wonder why you have been... But who can you fully trust? However, if you feel there is nothing beyond you and that you have learned, that you have been on training courses, you will need to take the plunge! I don’t know if you feel the same but during a lecture everything seems easy, quick, simple. It is like magic!

What is the best option to be ethical and efficient?

First option: a bridge. It means you will manage to have the implants surgical step with the implants done in the best conditions.

If you are ethical: primum non nocere! First don’t harm!

The smart way, of course, is to do implants you will fix the problem where the problem is, without damaging the neighbors.

But now that you are alone without safety net, you don’t know where to begin. It is time for you to become your own specialist.

All this is first a matter of state of mind: YES YOU CAN! Yes, all what we have to do in this dental case is simple: it is a matter of screws and plaque. It is just at a very smaller scale. Nevertheless, we have the same constraints and an additional foe “the bacteria”.

Don’t lose your common sense, consider the stair case step by step and “THINK SIMPLE”. You don’t have a plank thick enough for your screw, add a back plate! The idea is the same, may be some more details to take into account, and the support is a living body you are supposed to “keep alive”… it is appreciated. (Joke)

Now, you will need to take the plunge! I don’t know if you feel the same but during a lecture everything seems easy, quick, simple. It is like magic!

What are the imaging tools to do a good job.

What are the imaging tools matching with the needs? The most common is CT scan, easy to find but you will get many raw slides and you build the 3D in your mind. Keep this to the stone age due to the huge rate of radiation.

The most accurate and safe in the market is the cone beam system.

With a Cone Beam, you have:

- Safety: 70 to 100 times less radiations than with a CT scan.
- Accuracy: the image is much more detailed and you can navigate in 3D to overlook for the exact information you need. Then you will be able to set virtually your implants to stick perfectly with the needs.

On the crest, don’t stay exactly in the middle, but little on the palatal side. The buccal flap will protect the implants more efficiently. Extend your incision at least one tooth from and one tooth back to have an easy access without a long vertical incision.

Make sure the incisions will not be close to the graft. You need to see easily what you are doing, it is a priority. The more you peel off the gums, the less you cut, the better your patient will heal. So you should always be smooth!

What is the best option to be ethical and efficient?

First option: a bridge. It means you will manage to have the implants surgical step with the implants done in the best conditions.

If you are ethical: primum non nocere! First don’t harm!

The smart way, of course, is to do implants you will fix the problem where the problem is, without damaging the neighbors.

But now that you are alone without safety net, you don’t know where to begin. It is time for you to become your own specialist.

All this is first a matter of state of mind: YES YOU CAN! Yes, all what we have to do in this dental case is simple: it is a matter of screws and plaque. It is just at a very smaller scale. Nevertheless, we have the same constraints and an additional foe “the bacteria”.

Don’t lose your common sense, consider the stair case step by step and “THINK SIMPLE”. You don’t have a plank thick enough for your screw, add a back plate! The idea is the same, may be some more details to take into account, and the support is a living body you are supposed to “keep alive”… it is appreciated. (Joke)
I will come back later on this technique. Peel of the gums smoothly on the buccal side with the periostet. Take off high enough to help you “SEE WHAT YOU DO”.

Surprisingly, you will see it is helping a lot!

You are now facing an attractive wall of bone asking for a window, you can now drill the way you want: ultrasonic, diamond bur... If you have no “Parkinson", I feel and I recommend the diamond bur; it is perfectly safe and much quicker.

The result may be as follows: “The more you try to learn, the less you know”.

For the same question in the same conditions, you may be told anything and its opposite... Maybe this is not really helping but the state of mind is often: big graft, big delay!

Now, big question: graft and implant in 1 or 2 times?

You came to all the conferences of CAP, you read a lot, you have watched many videos.

The result may be as follows: “The more you try to learn, the less you know”.

For the same question in the same conditions, you may be told anything and its opposite... Maybe this is not really helping but the state of mind is often: big graft, big delay!

Now, a second ceiling, you set an absorbable membrane.

For good, “resorbable” in 2-3 months, in time with the natural process.

- You did not stab it, you win.

Or, as a second ceiling, you can use a hemostatic bone substitute, in dental and maxilla facial surgery.

Process:
1. collection of a bone biopsy at the center of the treated site with a trephine bur.
2. Fixation in 70% ethanol, with a trephine bur.
3. trichrome goldner staining (NOVOTEC laboratory, Lyon, France)
4. 3.8 months: dense bone is available, osteoblasts become osteocytes.

What happens in the sinus after some months? Let us see more samples:

Histological evaluation of hu- man bone tissue after bone reconstruction with MATRIBONE, a collagen-based bone graft substitute, in dental and maxilla facial surgery.

Case 1: Biopsy after 4 months
45 year old female, 16 extraction, bone deficit in height and thickness.

Now softly lift off the membrane from the bottom of the sinus, the same way you would lift a carpet! Once more avoid “Parkinson“ and take your time. This step is important, it is not a race! You will see many “movie stars“ proud to say they are very fast. As a matter of fact, the quicker you work, the better is the healing, but the main point is to be accurate and smooth. The stop watch comes next...

Once more, I can tell you what I have done for more than 20 years. Don’t lose your common sense: a graft set in the bottom of a sinus is like a loose cargo in the bottom of a hold.

As soon your patient walks or goes down the stairs, you can imagine how it is shaking. Beyond the mechanical properties of the graft itself, what we will talk about in a minute, you can expect the fragile Schneiderian membrane will not be a great help.

Once more you should be practical. Put a screw in the middle! If your graft is rolling, there will be no healing, not fiber growth, no new blood vessel, and you will fail.

A stable graft is compulsory to get a predictable healing, with a stake in the middle; you make it a sticker.

Now, big question: What kind of graft?

You have attended many lectures, read many reports, gone on internet: each time the material considered is the best and fits 100%.

All the materials are the best! How can you make your mind?

To enter the problem in a relaxing way: “EVERY KIND OF GRAFT CAN MATCH” and the market is wide..

First of course, you have the bones:

- Autograft bone: seen as the best.
- No immunogenic reaction, but you need to harvest. If you take the graft on the chin or the ramus you may have pain, inflammation and paresthesia. If you use the hip or the skull, you get involved in a heavy process, too heavy.
- allo graft, xenograft are dry bone despecified with slow remodeling and a granular display which is not helping or a cubic display not easily matching.
- You have coral, hydroxyapatite, calcium carbonates, bruscites, phosphocalcic, ceramics, tricalcium phosphates, biphase ceramics, polymers, bioglass, calcium sulfates, composites... The list is long...
- All materials can fit. Anyway, same as for your car. Four wheels and an engine means the same as for your car.

- 8 months: dense bone is available, osteoblasts become osteocytes.

What happens in the sinus after some months? Let us see more samples:

Histological evaluation of human bone tissue after bone reconstruction with MATRIBONE, a collagen-based bone graft substitute, in dental and maxilla facial surgery.

Case 1: Biopsy after 4 months
45 year old female, 16 extractions, bone deficit in height and thickness.
New coating could eliminate implant failure risk

By Dental Tribune International

TORONTO, Canada: Although their success rate has been reported as about 98 percent, dental implants can fail owing to biological and technical issues over time. In many cases, the body’s inflammatory response causes rejection. Canadian research has now presented a new implant coating that helps disrupt this immune mechanism to prevent both the risk of implant failure and the need for anti-inflammatory drugs.

The disruptive new anti-inflammatory polymer was developed by Dr. Kyle Battiston, a postdoctoral fellow at the Faculty of Dentistry and a recent graduate from the Institute of Biomaterials and Biomedical Engineering at the University of Toronto. It was originally designed as a tissue-engineering scaffold that allows tissue engineers to grow cells successfully.

Battiston and his colleagues were able to coat implants with the biomaterial, which is derived from a family of polymers found to reduce inflammation, specifically when it interacts with white blood cells, and discovered that it coating calms the body’s immune response.

“We’ve learned this family of materials can retain its anti-inflammatory character while adapting diverse physical properties,” said Battiston. The material could thus be used for a wide variety of medical treatments.

Battiston plans to market the coating through his new startup company KSP2 within the next five years.

According to the American Academy of Implant Dentistry, 5 million Americans already have dental implants and this number is growing by 500,000 a year. About 10 percent of all U.S. dentists place implants today. The association estimates that the U.S. and European market for dental implants will reach $4.2 billion by 2022.

Case 2: Biopsy after 12 months
57 year old female, extraction 29–26, 25 missing, bone height in 25: 4 mm.
Treatment: sinus lift lateral approach with MATRIBONE and COVAMAX.

For what i have seen, the best is COVA MAX de BLOM UP: originally developed for cardiology, this membrane: 100% biosynthetic collagen type I.

For centuries, gifted colleagues have improved the knowledge.

FOR THE best tools.

What you will get is a safe, efficient and predictable result.

For good:
- Make single loops
- Stab not to close to the slot
- Start on a stiff part, not far from the middle, to make sure you will have no staggering between the two edges.

Your patient should clean quickly without losing the suture!
For 3 years now, I have used only COVA MAX and MATRIBONE of BLOM UP. After having tried most of what is available on the market, I really feel happy.

I have found what we all look for: an easy and predictable tool. If ever I may be a help for you, feel easy, in the mind of the Pierre FAUCHARD Academy, the international Academy of dental surgery, the door is always open and I have stocks of COVA MAX and MATRIBONE for those who would like to try.

You have the skills, use the best tools.

What you will get is a safe, efficient and predictable result.

After 8 months

Same day

Dr. Dominique Caron
- Dentoscope 2014, 126: 32–38
- Dentoscope 2014, 127: 32–38
- Béatitude Histologie Novotec 2014
- Lecture Paris V Chirurgie Pre Prothèse
- Versailles Dental Clinic, 2008–2015
- Follow up of four different kind of Allograft in Sinus Lift
- Versailles Dental Clinic, 2013–2015
- Thirty cases of Sinus Lift by Lateral Approach with Maxi Bone and Cova Max
- BLOM UP Web Maxillofacial Surgery

For further information, please contact the author:

Dr. Dominique Caron
E-mail: dominique.caron@free.fr
Website: http://www.biom-ups.com

About the Author