Groupe Sebbin is a true success story and thousands of patients around the world have benefitted from its innovative high quality devices and ‘best-in-class’ customer service. Until now patients and surgeons in the UK have not been able to access Sebbin devices. I’m incredibly excited to report that a team of three highly-trained, motivated and experienced Business Managers are now providing a ‘best in class’ service to the multiple stakeholders involved in the buying process. The team aspire to become experts in reconstructive and aesthetic breast surgery and true partners to surgeons in the operating room. The response to Meso BioMatrix (our new Acellular Peritoneum Matrix) has been incredible and surgeons quickly recognise the benefits of a bioscaffold designed ‘ground-up’ to meet all of the ideal requirements of breast surgery.

As a team we are very busy promoting our extensive reconstructive portfolio and surgeons already see the benefits of a relationship with Sebbin. We will be delivering our value messages at a number of major conferences this year including the London Breast Meeting (September 4 & 5), ORBS in Nottingham (September 21-23) and BAPRAS in Birmingham (November 25-27). If you plan to attend any of these meetings please visit our booth and the team will be delighted to introduce you to our innovative portfolio.

Establishing a new business and brand in a highly competitive market like the UK is both challenging and exciting in equal measure. The Sebbin UK team is embracing the challenge and we look forward to sharing our progress, why not in the Expander…

Happy reading.
The appearance of a periprosthetic effusion, more than a year after the introduction of breast implants generates a delicate diagnostic and therapeutic problem, already mentioned in numbers 2 and 14 of the Expander. Dr. JM O’Donoghue summarizes in a clear overview, current knowledge on the subject. The Expander is pleased to welcome the first guest across the Channel, pioneer of many, we hope.
INTRODUCTION

‘Late’ periprosthetic seroma collections in patients with breast implants have been arbitrarily defined as those seromas that occur more than one year after implantation [1]. Late seromas are a cause of patient anxiety and can be a diagnostic dilemma for clinicians. Diagnostic dilemmas can lead to delays in management which may have significant consequences. This short overview aims to elucidate the causes, the diagnosis and the management of late seromas occurring in patients who have undergone insertion of breast implants either for cosmetic or reconstructive purposes.

CAUSES

Late seromas are uncommon, with a reported incidence of <1% in large series [2,3]. The pathophysiology of fluid formation around implants is not understood but is thought to be a secondary vascular/lymphatic fluid egress in response to trauma such as mechanical shear, inflammation in response to late infections [4] including fungal infections (Figures 1 and 2) or in association with double capsule formation [5].

The association between double capsules and late seromas is not entirely clear as both conditions may not coexist. While the ‘salt depleted’ method used in biocell texturing has been implicated in both seroma and double capsule formation by some authors [2,5,6], it is worth noting there have also been reports of seromas developing in association with microtextured devices [7]. In addition to benign associations, late seromas are a known presenting sign in up to 75% of breast implant associated anaplastic large cell lymphomas (BIA-ALCL). According to the Surveillance and End Results (SEER) program of the National Cancer Institute, approximately 1 in 500,000 women are diagnosed with ALCL in the United States each year. ALCL in the breast is even rarer with approximately 3 in 100 million women per year in the United States being diagnosed with ALCL of the breast in the absence of breast implants. Although the reported number of cases of ALCL in women with breast implants is still low, the increasing number of reports suggests that ALCL in association with breast implants has a higher incidence than expected from the SEER data alone suggesting a possible causal relationship. Although it has been suggested that textured implants are more likely to be linked to BIA-ALCL [8] in a more recent review, 55% of the cases reported to date had no data available about the texturing characteristics of the implant shells [9]. Cases have been reported in implants with smooth and polyurethane coated implants as well as textured silicone implants.

DIAGNOSIS

Late seromas usually present with unilateral swelling. Bilateral simultaneous late seromas are very rare. Differential diagnoses of unilateral breast swelling in the presence of breast implants include late haematomas secondary to traumatic tears in the presence of double capsules, late infection, implant rupture, generalised breast oedema and a breast mass. A careful history and examination is paramount as it will direct the most appropriate investigation. While algorithms may be helpful [1], ultimately late seromas are most easily diagnosed on ultrasound...
examination. Ultrasound guided aspiration should be performed and the fluid sent for microbiology and cytological evaluation. A high index of suspicion should direct a specific request that the cytology specimen be examined by a pathologist with an interest in lymphoma in order to exclude BIA-ALCL. Immunohistochemical analyses for Cluster of Differentiation markers (CD30) are usually positive and Anaplastic Lymphoma Kinase (ALK) markers are usually negative in BIA-ALCL. Other investigations should include a capsular biopsy. A digital mammogram, breast MRI and a CT PET scan should be employed for further local assessment and staging as the diagnosis becomes apparent [10].

**MANAGEMENT**

Management of late seromas depends on the cause. In the absence of infection or implant rupture, simple drainage may suffice for those seromas proven to be benign. For those cases which are refractory to simple drainage or have an associated infection, implant rupture or capsular contracture, then surgical exploration with appropriately targeted management is warranted. For those with BIA-ALCL treatment is mandated within the confines of a multidisciplinary team decision-making process that should involve surgical oncologists, plastic surgeons, radiation oncologists and haematologists. For those patients with BIA-ALCL who present with late seromas and have capsular confined disease as opposed to a mass or axillary lymph node involvement, total enbloc excision of the capsule and implant is recommended. Every attempt should be made to do this without spilling the seroma fluid into the breast cavity. All specimens should be sent for histopathological evaluation. There is no consensus on whether the implant should be replaced. Radiotherapy and chemotherapy are usually not required for this particular subgroup of patients and follow up should be for a minimum 5 years at 6 monthly intervals with breast imaging yearly for the first 2 years [10].


**The dissatisfied patient**

Interest in plastic surgery continues to grow tirelessly. Television, internet and newspapers encourage people to believe in miracles. All plastic surgeons have experiences of meeting potential patients with body dysmorphia disorder or an "addiction to surgery" during consultations. The authors have systematically reviewed the literature on the psycho-social aspects of facial cosmetic surgery and on candidates for rhinoplasty or blepharoplasty. Studies on body dysmorphic disorder were eliminated. 27 studies were selected, including 16 involving nose surgery. Certain patient characteristics were established. The primary type was what is known as SIMON, i.e. Single and Immature Male who is Overly expectant and Narcissistic. Women are more often satisfied with their rhinoplasty than men (three times more often). One study found that some men present with psychiatric disorders. Among dissatisfied patients, overly vague and unrealistic desires were common, as was the hope for a result that would lead to an improvement in the patient’s work or personal life. Patients who bring a photograph of a celebrity with them or who very specifically describe the changes they want without considering the limitations of surgery or the role played by chance are to be avoided. Whenever surgeons detect an infantile or narcissistic personality, they must refer the patient to a psychiatric consultation. In the Sixties, surgeons were happy to recommend a psychiatric examination before surgery. Over the past thirty years, this attitude has become increasingly rare, particularly given patients’ own reluctance. The authors advised that a questionnaire be filled out before surgery in order to define the patient’s expectations concerning the surgical outcome and its social impact. Another questionnaire following surgery should be completed to establish whether the patient’s hopes had been met. However, some patients cannot be prevented from feeling dissatisfied regardless of the level of experience of the surgeon, the surgeon’s understanding of the patient’s psychological state or the success of the operation.

Botulinum toxin and breast reconstruction

In the USA, the majority of women who, after undergoing a mastectomy following cancer, wish to receive a breast reconstruction choose to have an expander implanted, followed by a prosthesis. The expander is placed under the chest, either immediately after mastectomy or a few months later, and the prosthesis is inserted once a sufficiently large space has been created. The expansion period is painful. The muscle can undergo contractions. Botulinum toxin counteracts pain. It used to be thought that this was related to its ability to prevent muscle contractions. It seems, however, that the toxin inhibits Substance P, which plays a role in transmitting pain signals to the central nervous system. Botulinum toxin is used to help painful conditions such as migraines, tennis elbow, chronic pelvic pain and fibromyalgia.

It can be used to prevent muscle spasms following breast reconstruction using the latissimus dorsi flap.

The authors investigated the effect had botulinum toxin on thirty women who had undergone a breast reconstruction using an expander. One group received 2 cm$^3$ of toxin A at 20 units per mL, and a control group received 2 cm$^3$ of physiological saline. The injection was delivered during the initial operation, after releasing the pectoralis muscle and dissecting the periprosthetic space.

Four intramuscular injections were delivered in succession, starting in the upper lateral part of the muscle. Sedatives were used in an identical manner in both groups during the first three days after the operation. However, patients who had received botulinum toxin injections used far fewer sedatives between the 7th and the 45th day, while the expander was growing. This could be achieved more quickly. The FDA has not yet granted approval for this technique.

Breast enlargement and galactorrhea

The appearance of a milky discharge or effusion following a breast augmentation rarely occurs, especially when the patient is not pregnant, has not given birth recently and is not undergoing hormone therapy. The authors of the article found eight cases of galactorrhea among 832 patients who had undergone a breast augmentation using a prosthesis. 44% of those patients were taking contraceptives, and 65% were nulliparous. All patients had experienced bilateral galactorrhea. They were young (26 years old, on average). Seven had increased prolactin levels, but those in the eighth patient were normal. Three had a galactocele that had been aspirated. In one uncertain case, the diagnosis had been confirmed using the Sudan IV test. The galactorrhea disappeared after one to three weeks in five of the patients. The galactoceles had been drained. In all cases, the discharge had dried up after eight weeks. The breasts of all patients were soft one year after the operation. The authors found only 40 cases in the literature. Normally, prolactin is secreted by the anterior lobe of the pituitary gland. Secretion is controlled by the hypothalamus. It is provoked by irritation of the chest wall, nipple stimulation and psychological stress. Mammoplasties, burns, herpes and spinal cord trauma can all cause hyperprolactinaemia and galactorrhea. Surgery via the areola and swelling of the chest caused by the prosthesis may also stimulate prolactin production. The study of prolactin secretion in 15 women both before and after breast augmentation showed no abnormalities, however.

The cause of galactorrhea and postoperative galactoceles remains a mystery. The use of opiates or certain anaesthetic drugs may play a role. Once galactorrhea is identified, all conditions associated with hyperprolactinaemia (such as renal failure, pituitary tumours and hypothyroidism) must be ruled out. If prolactin levels exceed 100 mg/mL, an MRI may be needed to check for pituitary tumours. If the patient suffers from a galactocele, treatment involving a lactation inhibitor (bromocriptine) may prove effective.


Environment and palpebral ptosis

Palpebral aging is associated with drooping eyebrows, excess skin on the upper eyelid, fat protrusions around the eye and palpebral ptosis. The lower edge of the upper eyelid overlaps the limbus by more than one millimeter and can obstruct the visual field. Ptosis linked to aging should be differentiated from congenital ptosis or ptosis linked to neurological disease. The authors, interns at the University of Ohio in Cleveland, studied the role played by environmental factors in the elongation of the upper eyelid levator, which is the cause of ptosis. The study was carried out at the Twins Days Festival held in Twinsburg, Ohio, which was attended by thousands of pairs of twins. We had previously reported, in two analyses published in the Expander, on studies carried out on groups of homozygous twins which demonstrated that environmental factors affected facial aging and breast ptosis.

The authors studied 286 pairs of twins whom they photographed face-on, at rest and when smiling. They eliminated subjects with asymmetrical brows, congenital ptosis or enophthalmos. They kept 96 pairs of identical twins. The degree of ptosis was measured using photographs, by comparing the distance from the lower edge of the limbus to the centre of the pupil to that from the lower edge of the eyelid to the centre of the pupil. Ptosis was considered to be present if the eyelid overhang exceeded 1 mm. The results of the study are rather disappointing: ptosis does not appear to be accentuated by sleep deprivation, sun exposure, stress, tobacco use or alcohol consumption. Wearing soft or hard contact lenses does appear to encourage ptosis, however.

Verneuil’s disease

Verneuil’s disease is a chronic suppurative disease of the pilosebaceous follicles. It occurs in cutaneous areas that have apocrine glands (armpit, inguinal folds, and buttocks, area under the breast, areola, and neck). It develops in episodes, eventually becoming chronic. This condition, well-known to plastic surgeons, can start to heal only after the affected areas have been removed. It is also called hidradenitis or hidradenitis suppurativa. It was first described by Velpeau (1795-1857) in 1839, but Verneuil was the first to attribute it to the sweat glands, in 1854. [1].

Aristide Auguste Stanislas Verneuil (1823-1895)

He was born in Paris, where he later also studied. Promoted to junior doctor in 1843, he studied under Lisfranc, Demonvilliers and Malgaigne. After presenting his thesis in 1852 on the “locomotion of the heart”, he was appointed associate professor in 1853, and then professor of clinical surgery in 1869. He practised in several hospitals around Paris, from the Pitié-Salpêtrière to the Hôtel-Dieu. He wrote several books on tuberculosis and summarised his clinical observations in a book entitled ‘Mémoires de Chirurgie’ (Memoirs of surgery). The first volume of this book is devoted to reconstructive surgery. [2] Verneuil reviewed various aspects of plastic surgery in the second half of the 19th century. He died with numerous honours under his belt, but without leaving a great legacy as a surgeon.


Farabeuf retractors

All surgeons use “very simple metal retractors, bent at both ends in a right angle on the same side” [1], which are colloquially known as "Farabeufs". The surgeon who invented them was famous in his day. A statue and an amphitheatre were erected in his honour at the former Paris Medical School.

Louis Hubert Farabeuf (1841-1910)

He was born in a village in Seine-et-Marne, France. He studied medicine in Paris, where he became a junior doctor in 1864. Interested in anatomy, he became a doctor attached to the anatomy laboratory in 1872, then a specialist in anatomy, physiology and histology in 1876. He established the Practical School of Medicine in 1888. Following his promotion to tenured Professor of Anatomy in 1888, he described many anatomical elements (including Farabeuf’s Triangle and the sacropubic rectogenital laminae) and instruments (retractors, rugines, amputation saws, etc.). He described the backwards dislocation of the thumb and the relevant reduction process. His concise manual on operative technique, ‘Précis de Manuel Opératoire’, was reissused several times. Although he was a professor whose opinion was greatly sought, from the age of sixty he began to show signs of mental illness, which was long attributed, probably incorrectly, to the syphilis that he contracted during his youth at the annual ball for medical students in Paris.

Silicone gel and hypertrophic scars
A questionably effective solution

Cancer-fighting drugs are administered to both children and adults via a catheter implanted in the anterior thoracic region. Once the injection chamber has been removed, children are often left with a large, hypertrophic scar as a reminder of the chemotherapy and cancer they endured. The techniques used to treat hypertrophic and keloid scars cannot be used on children, as they are either too painful (corticosteroids and laser treatment) or too dangerous (radiotherapy). Silicone gel sheets have been widely used in the treatment of burns and hypertrophic scars and are considered to be both safe and effective.

Once the implantable chamber has been removed, a port scar is left behind that is more or less the same size for all patients, thereby enabling a comparative study among children treated with chemotherapy to be carried out. Following strict selection criteria, the authors split the children into three groups. In the first, a silicone sheet was applied to the scar for two months, in the second it was applied for six months, and in the third no treatment was used. The silicone sheet was applied 14 days after the chamber had been removed. The scars were rated according to the Vancouver Scar Scale.

Thirty-six children were studied over the course of one year. No difference was noted between the results of the three groups. After a year, the scars covered for two months were narrower than those treated for six months, and were identical to those of the third group (no treatment). Although it has yet to be confirmed by other sources, this serious, precise study shows that we often embrace techniques without formal proof of their efficacy.


Join the GROUPE SEBBIN

AWOGyn:
from September 17th to 19th 2015 in Berlin, Germany

ORBS:
from September 21st to 23rd 2015 in Nottingham, United Kingdom

DGPRAC:
from October 1st to 3rd 2015 in Berlin, Germany

EASAPS:
on October 2nd and 3rd 2015 in Lisboa, Portugal

BAAPS:
on October 8th and 9th 2015 in London, United Kingdom

EUROPHARMAT:
from October 13th to 15th 2015 in Nice, France

GACD:
on October 23rd and 24th 2015 in Koln, Germany

SBCP:
from November 11th to 15th 2015 in Belo Horizonte, Brazil
The first training session performed by SEBBIN University with live surgery was held on last June 22 and 23. The theme was breast augmentation with anatomical implants and originated great interest to our attendees.

› Do not hesitate to contact us if you want to attend our new sessions:
- September 25 and 26, 2015:
  Autologous fat transfer in aesthetic surgery: face and breast.
- December 11 and 12, 2015:
  Immediate breast reconstruction.

The development of a thromboembolism is one of the most feared complications that could arise as a result of a surgical procedure, and plastic surgery is no exception. Prophylactic measures are therefore essential, as is the identification of subjects at risk. As part of a project carried out by the American College of Surgeons, the authors studied the medical records of 17,774 patients who had undergone body-contouring surgery. Among the doctors who participated in the study, 60% were plastic surgeons and the others were generalists. 94% of the individuals operated on were women. 67% of procedures were mammoplasties, and 30% were abdominoplasties. 92% involved one part of the body, 7% involved two parts, and 1% three parts. Obesity was defined according to WHO criteria (obesity level 1 if BMI is over 30 kg/m², level 2 between 30 and 35 kg/m², and level 3 over 35 kg/m²). All associated pathologies were recorded: arterial hypertension (30%), diabetes (6%), dyspnea (5%), tobacco use, etc.

99 patients had experienced a thromboembolic complication (46 had phlebitis of a deep vein, 44 a pulmonary embolism and 9 a combination of the two). Several factors were demonstrated using a statistical method. The risk is higher in men, individuals aged over 65, individuals who have undergone surgical procedures on multiple areas of the body, individuals suffering from obesity, high blood pressure, diabetes, infection or dyspnea, and hospitalised patients (almost 80% had been operated on as outpatients). The authors supplied coefficients for the risk factors: age 45-65 = 1, over 65 = 2; BMI: 30-35 = 2, more than 35 = 3; hospitalisation = 2; scarring problems = 1; torso surgery = 2; multiple operations = 2. The sum of these figures can be used to classify patients under one of three categories. From 0 to 4, the incidence of thromboembolism is very low (0.14%), and from 5 to 7, the incidence is 0.97%. Above 8, the risk is high (2.95%), 20 times higher than in the first group.

The treatment used to prevent a thromboembolism provides definite benefits and presents a low risk of haematoma. Nonetheless, this study provides information only on the complications that occurred within 30 days after surgery. Subjects at risk should ideally be monitored for 60 days.

Staples have been widely used since the early 20th century to suture skin. Michel suture clips, which leave characteristic marks on the skin, have been replaced by single-use staplers, filled with very fine staples which can be used to suture the scalp or in an abdominoplasty, for example.

What was used in the past? The Romans used small metal plates with a hook at each end. In the 19th century, Vidal (de Cassis) proposed that incisions in the skin be closed using “fine grips”, i.e. pincers with pointed ends that were rarely used.

In fact, the closing of wounds and incisions was already practised in India, six hundred years before our time. The Sushruta Samhita, a medical text of that period, describes how black ants could be used to close wounds and even intestinal perforations. [1] A giant ant was placed on the wound, where it would bite down across both edges. The ant was then decapitated, leaving only its head and mandibles in place, which continued to tighten despite the insect's death. The same technique has been found around the world, and in South America in particular. In 1845, Salvatore Furnari reported in the Journal of Surgery [2] that, during a trip to Algeria, he had observed that the “thebibs” (traditional doctors) used ants (Scarites pyramon) to suture facial wounds. He proposed to a manufacturer that they create a similar instrument for suturing during eyelid surgery. The technique appears to have been used across the Mediterranean region until the end of the 19th century.

**FLASHBACK**

**ON THE HISTORY OF RHINOPLASTY**

**CHAPTER VII: BUILDING NOSES IN THE 20TH CENTURY**

The three main principles for nasal reconstruction were established in the 19th century: the use of forehead flaps, deep lining, and frames. These principles continued to be followed in the 20th century. The skin covering for the nose is almost always composed of skin taken from the forehead. Up until the mid-20th century, surgeons used to employ the Tagliacozzi technique of using an arm flap in rare cases where the forehead skin had been destroyed or scarred. In order to reconstruct the tip of the nose and the nostrils, the outline of the forehead flap was modified into three types: oblique, sickle or lateral. In 1942, John Marquis Converse described a scalping flap, which enables the scalp and the skin above the eyebrow arch to be lowered. [1] This technique was used until the Nineties. To reconstruct the nasal lining, nasal mucosa flaps and fragments were prioritised. In the early 20th century, some authors believed that a matching osteocutaneous insertion was required. In 1896, [2] James Israel of Berlin used an osteocutaneous flap taken from the forearm. Clarence Williams, in 1913, [3] reconstructed a nose by implanting a middle finger!

These mutilating, inefficient techniques were abandoned and preference was given to cartilage grafts. By the end of the 20th century: Burget [4] had identified and performed, in 1985, a number of truly aesthetic nasal reconstructions using refined skin flaps, together with vascularised flaps to reconstruct the nasal mucosa and multiple cartilage grafts to precisely sculpt the new nose. These guidelines are still valid in the 21st century.

According to the Medical Device Directive 93/42/EEC, anatomical breast implants and the acellular matrix Meso BioMatrix® are medical devices of class III, the Macrofill kit and the Fat Washer are medical devices of class IIa. These devices are intended to be used in plastic, reconstructive and aesthetic surgery. Groupe SEBBIN reserves the use of its devices to physicians trained in plastic, reconstructive and aesthetic surgery. Please read the instructions for use carefully before using these devices. Anatomical breast implants are manufactured by Groupe SEBBIN and are CE marked by the notified body mdc medical device certification GmbH number 0483. The Macrofill kit is manufactured by ALCIS on behalf of ADIPS CLOPL, distributed by Groupe SEBBIN and CE marked by the notified body BSI number 0086. The matrix Meso BioMatrix® is manufactured by DSM Biomedical and distributed by Groupe SEBBIN. It is CE marked by the notified body BSI number 0086. Custom made thoracic implants are Class IIb medical devices manufactured by Groupe SEBBIN and specifically according to written prescription made by a duly qualified medical practitioner stating under the responsibility of the latter the specific design requirements. They are intended to be used only for a specific patient in a plastic, reconstructive and aesthetic surgery. Please read the instructions for use carefully before using these devices.

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