

EXPERT GUIDE

MEDICAL *LiveWire*

JUNE 2015

AESTHETIC & COSMETOLOGY 2015



Cosmecare™

Adam Schaffner, MD, FACS
Board Certified Plastic Surgeon & Fellowship-Trained

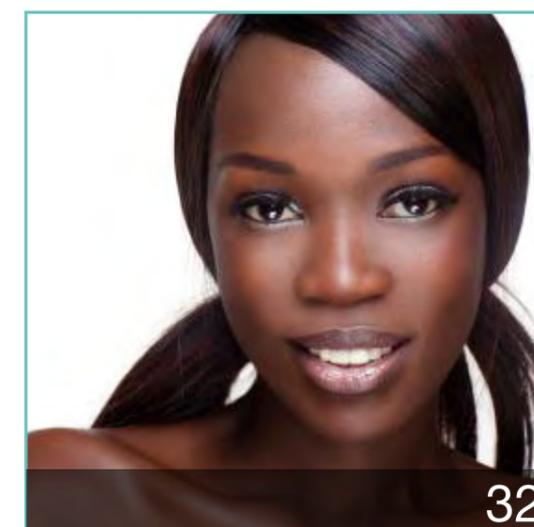
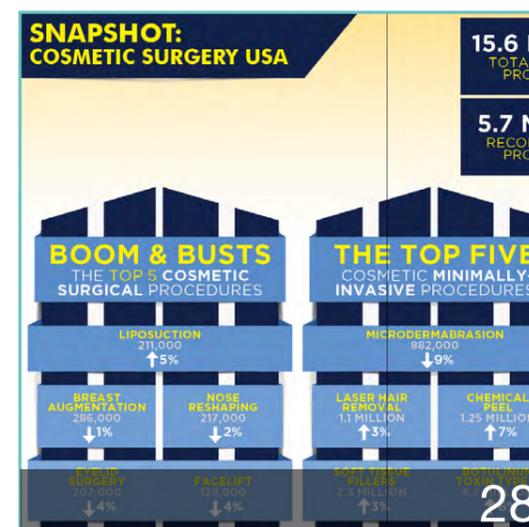
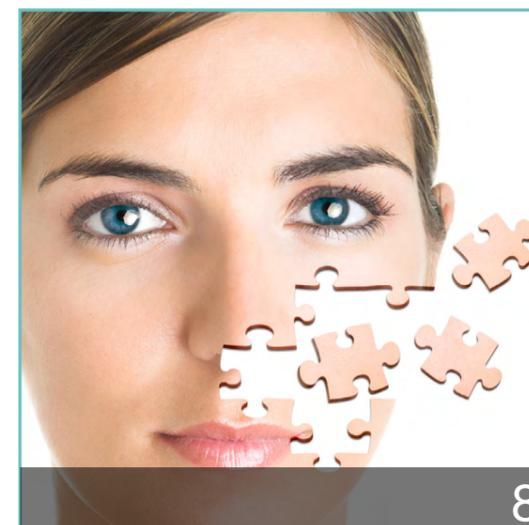
EP

MAS ELENA PROUSSHAIA PEREGUDOVA
MD, FACS (Post), FEBOPRAS
Consultant Plastic, Reconstructive & Cosmetic Surgeon

Dr. JUAN AGUIAR
MD, FACS

Contents

- 6 United Kingdom
- 8 The changing face of aesthetics from a nursing perspective
- 14 Current Issues in Breast Reconstruction
- 20 USA
- 22 Breast Augmentation: Challenges and Complications
- 28 Snapshot: Cosmetic Surgery
- 30 Guinea
- 32 5 Tips to treat hyperpigmentation on black skin
- 36 Expert Directory



Fenice Media Ltd | 101 The Big Peg | 120 Vyse Street | Birmingham | West Midlands | B18 6NF | United Kingdom |
Tel: +44 (0) 121 270 9468 | Fax: +44 (0) 121 345 0834 | www.corporatelivewire.com

Chief Executive Officer
Osmaan Mahmood

Senior Designer
Lai Chun Lok

Marketing Development Manager
Dilan Parbat

Awards Managers
Leah Jones, Elizabeth Moore

Data Administrator
Dan Kells

Contributing Organisations

Managing Director
Andrew Walsh

Editor-in-Chief
James Drakeford

Research Manager
David Bateson

Account Managers
Norman Lee, Thomas Patrick, Kerry Payne, Sophie Smith, Jade Hurley

Head of Finance
Simon Carter

Cosemcare,
McIndoe Surgical Centre,
NYC Plastic Surgery Practice of Adam Schaffner, MD, FAC,
Dr. Juan Aguiar

Publishing Division
Jake Powers, John Hart, John Peterson, Alex Young

Deputy Editor
Josh Hill

Production Manager
Sunil Kumar

Competitions Manager
Arun Salik

Senior Credit Controller
Jorawar Johl

Art Director
Timothy Nordan

Luxury Travel Guide Editor
Laura Blake

Project Managers
Ibrahim Zulfqar, Rocky Singh, Zoe Cannon

Administration Manager
Nafisa Safdar

Accounts Assistant
Jenny Hunter, Joseph Richmond, Kaison Dover, Chris Wood



James Drakeford
Editor In Chief

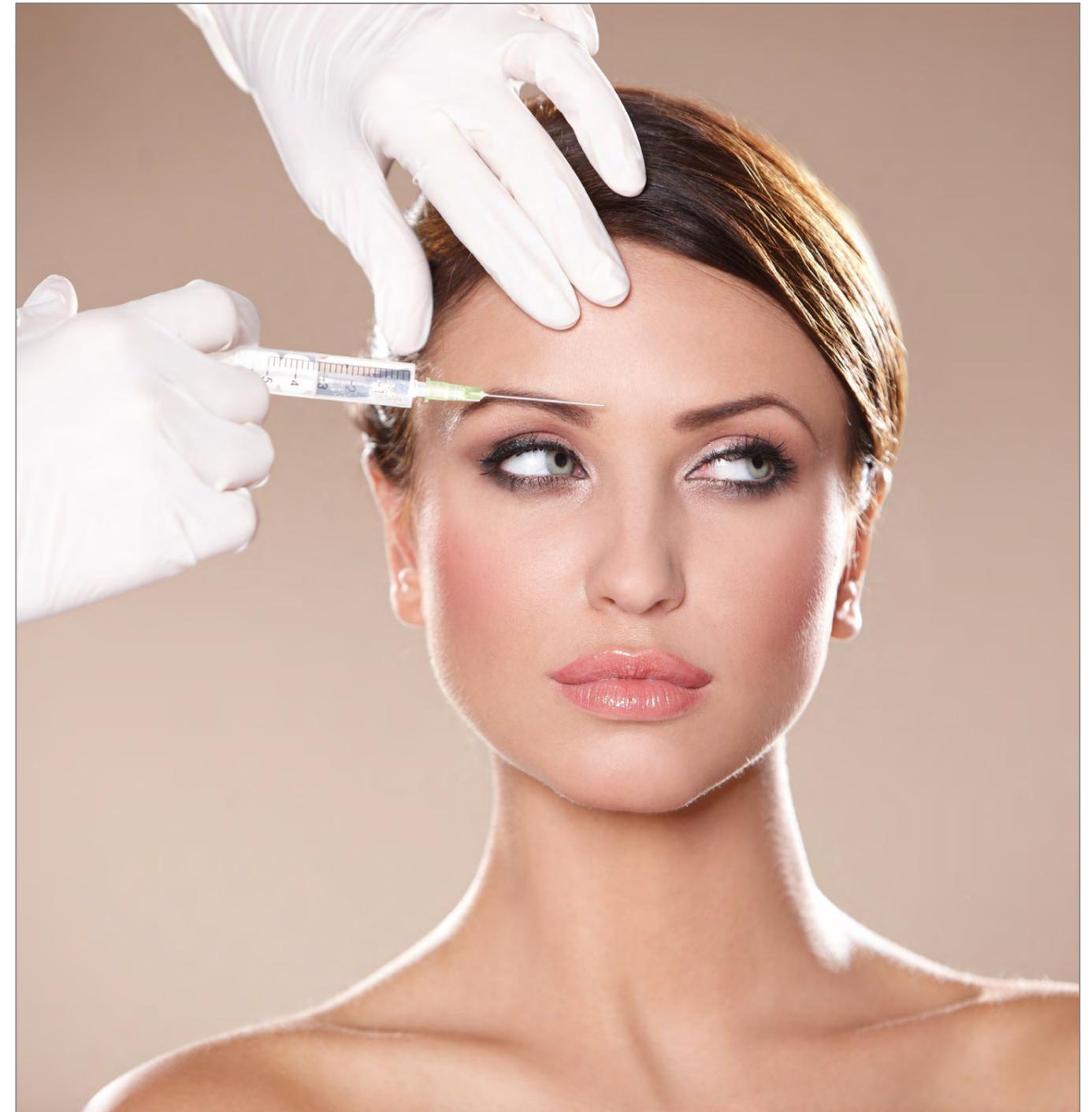
Introduction

It has been well documented in recent years that the global demographic has seen a sharp rise in the age of the population. Latest figures from independent think tank the Pew Research Centre in Washington claim that 10,000 Americans are turning 65 every day and that by 2030 70 million Americans will be over the age of 65. According to a study from the UN, World Population Ageing 1950-2050, the global population aged 60 and over is forecast to reach two billion by 2050 increasing from 606 million in 2000. By 2050, over-60s will represent one in three persons living in the developed regions, climbing to 37% in Europe. We have entered what independent economist George Magnus has coined “the age of ageing”.

Unlike many industries where commentators have focused upon the challenges this trend creates we are able to highlight the growing opportunities it unveils in the aesthetics arena. The International Association for Physicians in Aesthetic Medicine (IAPAM) say that these figures

give practitioners in non-invasive or minimally-invasive anti-ageing procedures the perfect opportunity to grow their business by capturing a rapidly emerging market. In this guide we take a look at the landscape for the medicalisation of ageing and beauty by detailing the key trends, developments in education & training, and outlining how practitioners can avoid litigation.

In terms of procedure trends minimally invasive procedures have increased significantly, while plastic surgery growth has been modest as men and women alike are increasingly looking towards anti-ageing treatments such as injections. However, breast augmentation still remains the most popular cosmetic surgical procedure performed and in this guide we have included an article on the current challenges and complications facing surgeons. We have also included a focus on the current issues in breast reconstruction and an article highlighting the specialist topic of treating hyperpigmentation on black skin.





United Kingdom



Elizabeth Bardolph

Liz@bardolph.wanadoo.co.uk
+44 (0) 1329 661 835

The changing face of aesthetics from a nursing perspective

By Elizabeth Bardolph



During the last 25 years nurses have been at the forefront in the treatment of non-surgical aesthetic procedures. These include the use of dermal fillers, the botulinum type A toxin cosmetically, chemical peels, and laser treatments. As well as treating patients many are instructing and mentoring their medical colleagues.

Recognising that a new specialty brought with it responsibilities, a group of entrepreneurial nurses established a forum for aesthetic nurses. This afforded nurses networking and educational opportunities. They also published guidance for best practice, and the internationally acclaimed accredited competencies.

Because their professional organisation felt that aesthetics was not part of mainstream healthcare, we founded the British Association of Cosmetic Nurses (BACN). Part of its

remit is to educate and foster good practice so that patient safety in this new specialty may be safeguarded.

The medicalisation of ageing and beauty

There are many examples of conditions other than disease processes *per se*, which attract the attention of the medical and nursing professions, obesity and the menopause being the most obvious. Now the ageing process and the enhancement of beauty can be added to the list. It was during the

Enlightenment that the idea of perfecting health began¹. The Georgian public self-medicated, bought manuals and purchased products² which they hoped would help restore health. The 18th Century also saw the advent of marketing including advertising and product distribution. As the nation became more prosperous through an improved market economy, so people became more

wealthy with an increase in disposable income.

In addition to these factors anti-ageing treatments were crossing from America to the UK. Collagen which was used in the treatment of burns and Drs A and A Carruthers were developing the use of the botulinum type A toxin cosmetically. Initially treatments were taken up by celebrities, and encouraged by the results, it was not long before the media promoted many of these treatments as 'lunch time' fixes. Alongside this was the realisation among some that physical appearance mattered in order to improve self-confidence, and secure a job or a partner. This too was encouraged by the media, and has become more potent with the advent of social media and the popularity of 'selfies'.

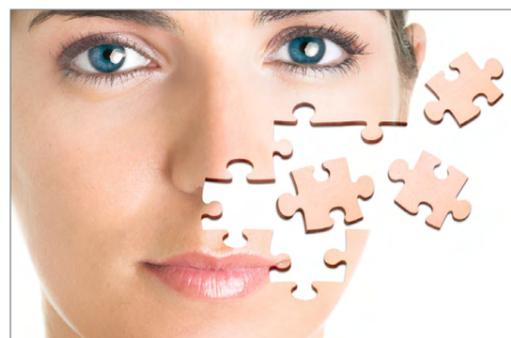
Although the public were initially cautious about anti-ageing treatments, the momentum rapidly increased resulting in the popularity of non-surgical treatments we are

familiar with today. To cope with the increase in demand more practitioners are entering this field. There is therefore a requirement for education and training which is not delivered in the National Health Service.

Education and Training

Currently education and training undertaken by doctors and nurses is product based, a format that seems set to change. The legal test for doctors and nurses is competence judged by the *Bolam*³ / *Bolitho*⁴ standard and underpinned by education and training. The BACN have updated their competency framework⁵ which recognises the requirement for specialist knowledge and skills at different levels of practice⁶. The document provides a benchmark for good practice and is being used in the structuring of an educational framework for Higher Education Institutions in line with Department of Health recommendations.

As recommended in the Keogh report⁷, Heath Education England





(HEE) is reviewing the qualifications required for non-surgical cosmetic procedures. Phase one established a proposed qualifications framework for five treatment modalities including non-surgical treatments. All practitioners will be expected to take part and there will be a range of entry points including accredited prior learning. A range of common themes including consent and ethics⁸ will form part of the curriculum ranging from foundation to PhD level. Training will be competence based. The Department of Health will support HEE with legislation as at present non-medical personnel are undertaking these treatments. The legislation will ensure that all consultations for dermal filler treatments are undertaken by a member of the NMC or GMC. The treatment can then be undertaken 'under supervision' by an appropriately qualified practitioner⁹. It is hoped that this more formal model of education will reduce the high level of litigation in this specialty, currently running at 20%.

Avoiding Litigation

While aiming to relieve distress medical treatments can cause iatrogenic harm. Non-surgical treatments are no exception and carry risks as well as benefits.

In this field many clinical negligence cases which come before the courts do so because not enough attention has been paid to the consultation and the consent process. Many patients are vulnerable and can suffer from low self-esteem which adds to the pressure medical practitioners face in wanting to help them. Although these patients self-refer, patient selection is key to a successful cosmetic outcome, and not everyone is suitable for treatment.

Obtaining valid consent is an ethical, clinical and legal requirement. It must be free from coercion and the patient must have the ability to understand the information given. All risks must be explained and recently the importance of patient autonomy in a competent patient was clarified

in *Montgomery*¹⁰.

Although ignorance is no excuse in law, many practitioners are ignorant of the legal requirements of the consent process.

Two way communication is key and practitioners have a responsibility to give as much information that patients need to make a decision. The amount of information is a matter for clinical judgement while respecting patient autonomy. Practitioners must also make every reasonable effort to ensure the patient has understood what has been said and it is helpful to give him a written information sheet. The signature on the consent form records the patient's decision and that a discussion has taken place. It is not proof that consent is valid, neither does it take away legal liability if all aspects of the consent process are not covered. Finally it is advisable to check the medical history and obtain fresh consent before each treatment episode.

Conclusion

For nearly a quarter of a century nurses have led the way in the use of non-surgical procedures with a group of pioneering nurses being responsible for raising the profile of education and setting standards.

Many factors have contributed to the medicalisation of the ageing process including those which directly impact on ageing and the way we approach it. These in turn have made people more aware of their appearance and the way others regard them.

The way in which education is undertaken is changing. Training will be competence based and legislation will ensure all consultations are undertaken by medical or nursing staff.

Finally, in order to reduce the incidence of litigation, those who are responsible for consultations and the consent process must be mindful of the legal requirements.

Cosmecare™

Elizabeth Bardolph is a certified nursing expert. She qualified as a nurse in 1969 attaining the position of Directorate Nurse Manager before leaving the NHS. Following family development, she spent eleven years in clinical research in parallel with two years of health education in industry. After establishing and managing an independent skin laser clinic within a District General Hospital, she founded her own business in 1999. Cosmecare provides specialist advice, health education and treatment of skin problems. She has recently completed the LLM in Medical Law and Ethics. In addition to her clinical duties, Liz acts as a nursing expert witness.

1. Porter R. *Health for Sale. Quackery in England 1660-1850*, (1989). Manchester University Press, p39.
2. Porter R and Porter D. *Patients' Progress*, (1989), Stanford University Press. Chapter 3.
3. *Bolam v Friern Hospital Management Committee* [1957] 1 WLR 582 at 587-588.
4. *Bolitho v City & Hackney Health Authority* [1998] AC 232 HL.
5. British Association of Cosmetic Nurses. *An integrated career and competency framework for nurses in aesthetic medicine*, (2014) RCN Accredited.
6. *Ibid.* pp20-21.
7. Department of Health. *Review of the Regulation of Cosmetic Interventions*, (2013), London. p7.
8. Spicer P. HEE, personal email 19/06/2014.
9. Rankin A. Working with Health Education England to change the future of the industry. *Journal of Aesthetic Nursing*, (2014), 3 (5), pp248-249.
10. *Montgomery v Lanarkshire Health Board* (Scotland) [2015] UKSC 11.



**Mrs Elena Prouskaia**ep@eprouskaia.com
+44 (0) 1342 330 434

Current Issues in Breast Reconstruction

By Elena Prouskaia

MRS ELENA PROUSSHAIA PEREGUDOVA
MD, FACS (Plast), FEBOPRAS
Consultant Plastic, Reconstructive & Cosmetic Surgeon

Issue 1. Lack of Information for the Patients

Currently advantages of autologous reconstruction are getting more and more known by patients. Most women are now well informed and they then become the strongest advocates of the best treatment for themselves. Amazingly some of them are still not told that DIEP reconstruction can be an option or even worse they are informed that LD flap from the back which sacrifices functional muscle is as good as a DIEP flap from the abdomen which allows us to preserve muscle function.

Issue 2. Immediate Reconstruction Surprisingly Seems to Have Lower Satisfaction Rates

The decision whether to offer immediate or delayed reconstruction is usually guided by the potential need for radiotherapy and of how aggressive the cancer is. Immediate reconstruction offers cosmetically the best possible result but unfortunately many of these patients are less satis-

fied compared to women who have had to live without a breast before they get their reconstruction done. It is a paradox, but it makes me think sometimes that the most important outcome of breast reconstruction is a patient's satisfaction and somehow we miss this point giving them the best possible result but with lower satisfaction rate.

Issue 3. Disadvantages of Immediate-Delayed Reconstruction with Expander in Irradiated Field

In my breast reconstruction work I am seeing a large volume of patients who had so called immediate-delayed breast reconstruction where an expander was inserted immediately after mastectomy to provide the patient with certain volume while awaiting the final reconstruction. Patients are usually told that it is better than being flat. Unfortunately it is well known that if patient will have radiotherapy there is very high chance that she will end up with hard and painful lump instead of anything looking like breast because of

developing capsular contracture in irradiated field. An expander in this case does not substitute the breast but creates pain, aesthetically unacceptable deformity and impossibility to fit the external prosthesis. The patient ends up lopsided and with difficulty of fitting in external prosthesis because of expander on her chest. These patients appreciate final outcome of reconstruction with their own tissue more than anybody else after living for a while with encapsulated expander. From an aesthetic point of view, in these cases I am rebuilding the breast using partially expanded skin which does not provide the volume of the other side. The best outcome of their reconstruction still looks worse than the result when the breast is rebuilt as a single unit from the flat chest. (See the Figure 1). In my opinion insertion expander as temporary reconstruction in patients who will have radiotherapy provides more disadvantages when advantages. Even if it is "convenient" to be able to tell the patient "you will not wake up completely flat" we should think

about what it will bring to this woman for next year or two until she will be having final reconstruction.

Issue 4. When Breast Fat Grafting Is Indicated?

Lipofilling is a relatively new technique, which is becoming increasingly popular. It is well known that fat graft loses about 40-50% of its volume in a first 6 - 12 months after the surgery. It is also well known that only certain volume of it can be transplanted in a single procedure otherwise it will not be vascularized and will not survive. There are publications from mostly the same few authors in the world claiming that the breast can be completely rebuilt with fat grafting. In my experience some of these patients came to my clinic after having multiple general anesthetics for repetitive fat graft procedures and the result was not even close to looking like a breast. Considering lack of strong evidence in the literature I currently do not recommend to my patients fat graft as a technique to rebuild the entire



MRS ELENA PROUSSHAIA PEREGUDOVA
MD, FACS (Plast), FEBOPRAS
Consultant Plastic, Reconstructive & Cosmetic Surgeon

breast. However I feel lipofilling is very useful for small secondary adjustments to improve fullness of upper pole or to give a bit more volume to reconstructed breast after reconstruction with DIEP or TUG flaps.

Using fat grafting to resurface defects after wide local excision is not something that makes me feel at ease. There is ongoing broad research regarding safety of fat grafting. No strong evidence was provided against fat transfer to breast tissue with previous history of breast cancer, neither there is enough evidence to prove the contrary. Injecting stem cells to the irradiated breast tissue after wide local excision knowing that there is always risk of recurrence is very different from injecting it to the area of complete mastectomy where no breast tissue was left.

Issue 5. New Exciting Horizons - Joined Breast Reconstruction and Lymphoedema Treatment.

Following mastectomy and axillary lymph node clearance for breast cancer it is not uncommon for the woman to develop lymphoedema of her arm on the side of the cancer. The exciting news is that now it is possible to perform an operation combining the breast reconstruction using tissue taken from abdomen (DIEP flap) with the restoration of removed axillary lymph nodes using vascularized lymph node transfer (LNT) from the groin in order to simultaneously rebuild the breast and treat the lymphoedema. The lymph nodes are transferred to the area affected by lymphoedema to restore lymphatic outflow. The blood vessels of the lymph nodes are joined under the microscope to recipient vessels. This allows the preservation of blood flow to the lymph nodes ensuring their survival in the new location. The newly transferred lymph nodes stimulate growth of new lymphatic vessels thereby improving the lymphatic outflow circulation. If LNT is not enough additional lymphatico-

venular anastomosis (LVA) is performed small through 2-3 cm incisions, which are made on the skin of the patient's extremity. The surgeon then looks for viable lymphatic vessels, which are generally less than 1 mm in diameter. These tiny channels are then connected under a high magnification microscope to very small veins using sutures, which are smaller than the human hair. This procedure creates new pathways, which then allow lymphatic fluid that has accumulated in the obstructed lymphatic system to divert into the venous system bypassing the obstruction.



Fig 1.

Patient 1.

Patient had mastectomy and later on her breast was rebuilt with tissue from her abdomen (DIEP flap). No expander was inserted and the whole breast was reconstructed as a single unit using abdominal tissue with very satisfactory cosmetic outcome.

Patient 2.

Patient had an expander inserted after mastectomy, which became painful, displaced and encapsulated, causing distress and discomfort to the patient for a long time. As a consequence of insufficient expansion there was no possibility to expand the skin enough. Final result after reconstruction with DIEP flap is good, but the flap skin is inserted in the middle of the breast as opposed to the case 1.



MRS ELENA PROUSSHAIA PEREGUDOVA
MD, FACS (Plast), FEBOPRAS
Consultant Plastic, Reconstructive & Cosmetic Surgeon

Mrs Elena Prousskaia is a Board Certified UK Consultant Plastic Surgeon. She is a member of the British Association of Plastic Surgeons (BAPRAS), Royal College of Surgeons, London (FRCS Plast) and European Board of Plastic Surgeons (EBOPRAS). She is also on the UK GMC Specialist Register for Plastic Surgery and holds the UK (CCT) Certificate of Completion of training in Plastic Surgery. She is one of very few female plastic surgeons in UK and brings a distinctly female perspective to her work, with a deep understanding of the physical and emotional concerns experienced by women undergoing cosmetic or reconstructive surgery.





USA



Adam Schaffner, MD, FACS

info@PlasticSurgeonInNYC.com

+1 212 481 6696

Breast Augmentation: Challenges and Complications

By Adam Schaffner, MD, FACS



Adam Schaffner, MD, FACS

Board Certified Plastic Surgeon & Fellowship-Trained

Breast augmentation is the most popular cosmetic surgical procedure performed. While popular, it is also the cause of many problems which result in unhappy patients who undergo subsequent operative procedures to attempt to solve problems caused by the primary augmentation. Such problems include, but are not limited to, capsular contracture, implant malposition, fold malposition, double bubble deformity, symmastia, rippling, deflation of saline breast implants, ruptured implants, desire for a different implant size (larger or smaller) and the need for a breast lift.



Revision breast augmentation is more difficult, complex and less predictable than primary breast augmentation. Tissues may be thinned due to the weight of the breast implants, anatomic planes may have been violated, anatomic landmarks may be distorted, and scar tissue will make dissection more difficult. There may

be more bleeding, especially if the scar tissue is extensive and if the capsule has to be removed due to capsular contracture.

All plastic surgeons aspire to have the lowest possible reoperation rate. Reoperation rates of approximately 20% in sequential post-market approval studies have remained relatively constant. Failure to improve

this rate of reoperation should serve as a motivating factor for all plastic surgeons that perform breast augmentation to critically analyse their pre-operative decision-making process, their surgical technique, and the post-operative care they provide. In doing so, we can work together to reduce the rate of reoperation as much as possible.

There is a difference between reoperations and revisions. Reoperations include any event that transpires in the vicinity of the patient's breast augmentation. This may include

breast biopsies and scar revisions. It may also include change of implant size and/or subsequent mastopexy. The reason for reoperation in these cases may be out of the control of the surgeon or patient. While it is important to reduce the rate of reoperation, it is of paramount importance to reduce the rate of revisions due to capsular contracture, implant or fold malposition, infection, extrusion, double bubble deformity, symmastia, or implant deflation or rupture.

As with all surgical procedures, the best results come from critical pre-operative analysis. The patient's desires and preferences must be discussed and honoured to the extent they are realistic and reasonable. Unfortunately, some patients desire implants of a certain size which may not be in their best long-term interest. They may also desire more cleavage than is possible given their intermammary distance. It is incumbent upon the plastic surgeon to educate the patient about the risks and benefits of breast augmentation in order

to set appropriate expectations and minimise the risk of complications. The optimal implant volume will fill the stretched envelope in addition to the existing breast parenchyma. The optimal implant dimensions for a given patient should be determined after assessing a patient's base width, anterior pull skin stretch, nipple to inframammary fold distance, sternal notch to nipple distance, and pinch thickness. While a patient may be a candidate for a range of implant sizes and styles, having an implant which is too large or too wide may cause problems which are difficult to correct and result in long-term dissatisfaction. It may also result in the need for revision surgery to correct rippling, atrophy, skin stretch and visible edges of the implant.

In short, plastic surgeons must recognise that implant volume is not the most important factor in implant selection. Breast implants should be selected based on proportions and dimensions. The final appearance of the augmented breast is related to the initial amount of breast tissue, its



Adam Schaffner, MD, FACS
Board Certified Plastic Surgeon & Fellowship-Trained

dimensions, and the size of the chest wall.¹ Biodimensional planning with precise measurements will lead to greater success in breast augmentation. Three dimensional computer imaging and simulation programs now allow surgeons to better visualise and precisely plan for breast augmentation surgery. Such programs also help to communicate possible results with given implants to a patient. Chest wall asymmetries may be better detected and shown. Using this technology may reduce the likelihood of operations for implant size change. It should be clear that the images simulated are not an implied guarantee of the result.²

Plastic surgeons have the option of using saline or silicone breast implants which are smooth or textured, round or shaped, form-stable gel breast implants. Form-stable gel breast implants minimise the risk of wrinkling, rippling or capsular contracture while providing shape to the breast.

Choice of incision is critical. The choices include inframammary fold, periareolar, transaxillary, and periumbilical. The incidence of complications such as infection, altered sensation, and risks of capsular contracture are lowest with the inframammary fold incision.³ This incision provides direct access to the subglandular and subpectoral planes without violating the breast parenchyma. However, if the incision will not fall into the inframammary fold after augmentation or if the breast has a constricted lower pole, other options may be considered. The periareolar incision provides central access and enables one to lower the inframammary fold. The transaxillary incision allows one to avoid placing a scar on the breast; however, it requires one to operate on tissue other than the breast and is associated with a higher rate of complications. The same is true of the transumbilical approach. The key is to understand the benefits and disadvantages of each of these incisions and choose the most appropriate incision for each patient.⁴

The plane into which the implant is placed is also critical. Placing the implant in the subglandular plane in the absence of adequate soft tissue coverage may result in thinning of the tissues, rippling, and palpable implants. There is a higher incidence of capsular contracture with implants placed in the subglandular plane. Of note, textured implants in this plane may have a lower incidence of capsular contracture. All implants placed in this plane make mammograms more challenging to interpret compared to implants placed under the pectoralis major muscle. In practice, the majority of “subpectoral” implants are placed in the “dual plane” position whereby the upper pole of the implant is under the muscle and the lower pole of the implant is in the subglandular plane.⁵ Plastic surgeons have shown great success with the placement of implants in the dual plane to minimise the risks of developing complications associated with implants placed in the subglandular plane.

Of course, meticulous surgical technique with precise pocket dissection is key. Obtaining hemostasis throughout the case, observing strict sterile technique, avoiding the use of gloves with powder, using antibiotic solution⁶, and employing technologies such as The Keller Funnel™ which allow the implant to enter the breast without touching the surgeon’s gloves or the patient’s skin are all points to consider to minimise the risk of post-operative complications.





Adam Schaffner, MD, FACS
Board Certified Plastic Surgeon & Fellowship-Trained

Despite all of the best efforts of the plastic surgeon, sometimes results are suboptimal. When expectations are not met, it is best to address them by trying to determine the cause of the complication to solve the patient's problem(s) and minimize the risk of them occurring in the future in other patients.

Patients who present for revision breast augmentation generally have high expectations to fix the problem. Unfortunately, sometimes problems are not completely correctable. Therefore, extensive pre-operative counseling and discussion regarding reasonable expectations is of the utmost importance.

Acellular dermal matrices (ADM) and meshes have enabled plastic surgeons to address complex problems

in revision breast augmentation such as thinned tissues, fold malposition and capsular contracture. It provides additional thickness and coverage to minimize implant palpability and supports the implant to prevent bottoming out or rippling.⁷ It is also prevents the implant from migrating into a previous pocket when changing the implant from the subpectoral position to the subglandular position or vice versa. Of added benefit, ADM has also been shown to reduce the rate of capsular contracture.

It is the hope that the concepts raised in this article will motivate all plastic surgeons to continue to strive to reduce the rate of revision breast augmentation and for patients to understand some of the complex issues involved in achieving the desired result from a breast augmentation.



1. Hedén, Per. "Breast Augmentation with Anatomic High-Cohesiveness Silicone Gel Implants (European Experience)." Chapter 115, pages 1322-1345 in *Surgery of the Breast: Principles and Art*. Third edition. Scott L. Spear, editor. Wolters. 2011.
2. Bengston, Bradley P. "The Highly Cohesive, Style 410 Form-stable Gel Implant for Primary Breast Augmentation." Chapter 116, pages 1346-1365 in *Surgery of the Breast: Principles and Art*. Third edition. Scott L. Spear, editor. Wolters. 2011.
3. Jacobson JM, Gatti ME, Schaffner AD, Hill LM, Spear SL. "Effect of Incision Choice on Outcomes in Primary Breast Augmentation." *Aesthetic Surgery Journal*. May 2012. Volume 32(4): 456-462.
4. Spear SL, Bulan EJ, Venturi ML. "Breast Augmentation." *Plastic and Reconstructive Surgery*. 114: 73e-81e, 2004.
5. Tebbetts, J. B. Dual plane breast augmentation: Optimizing implant-soft-tissue relationships in a wide range of breast types. *Plast. Reconstr. Surg*. 107: 1255, 2001.
6. Adams, WP, JL Rios; SJ Smith, Enhancing Patient Outcomes in Aesthetic and Reconstructive Breast Surgery Using Triple Antibiotic Breast Irrigation: Six-Year Prospective Clinical Study *Plastic & Reconstructive Surgery* January 2006; 117(1): 30-36.
7. Maxwell GP and A Gabriel. "Use of the Acellular Dermal Matrix in Revisionary Aesthetic Breast Surgery." *Aesthetic Surgery Journal* November-December 2009; 29(6):485-93.

SNAPSHOT: COSMETIC SURGERY USA

15.6 MILLION
TOTAL COSMETIC
PROCEDURES

↑ 3%

5.7 MILLION
RECONSTRUCTIVE
PROCEDURES

↑ 1%

BOOM & BUSTS

THE TOP 5 COSMETIC
SURGICAL PROCEDURES

LIPOSUCTION

211,000

↑ 5%

**BREAST
AUGMENTATION**

286,000

↓ 1%

**NOSE
RESHAPING**

217,000

↓ 2%

**EYELID
SURGERY**

207,000

↓ 4%

FACELIFT

128,000

↓ 4%

THE TOP FIVE

COSMETIC MINIMALLY-
INVASIVE PROCEDURES

MICRODERMABRASION

882,000

↓ 9%

**LASER HAIR
REMOVAL**

1.1 MILLION

↑ 3%

**CHEMICAL
PEEL**

1.25 MILLION

↑ 7%

**SOFT TISSUE
FILLERS**

2.3 MILLION

↑ 3%

**BOTULINUM
TOXIN TYPE A**

6.7 MILLION

↑ 6%

A REAR VIEW

**15% BUTTOCK
AUGMENTATION WITH
FAT GRAFTING* UP
FROM 2013 TO 2014.**

**98% BUTTOCK
IMPLANTS* UP FROM
2013 TO 2014.**

**44% BUTTOCK LIFT UP
FROM 2013 TO 2014.**

THE USE OF FAT IN MINIMALLY
INVASIVE PROCEDURES IS UP
2% FROM 2013 TO 2014.

* COUNTS OF PROCEDURES PERFORMED BY
ASPS MEMBER SURGEONS ONLY.



Guinea



Dr. Juan Aguiar, MD

info@doctoraguiar.com

+240 556 666 160



5 Tips to treat hyperpigmentation on black skin

By Dr. Juan Aguiar, MD

In West Africa, the most common complaint that plastic surgeons or dermatologists find is related to acquired pigmentary changes. Among them, postinflammatory hyperpigmentation and melasma are the most frequently seen.

Introduction and Definition

Postinflammatory hyperpigmentation, also called postinflammatory melanoderma, is an excessive pigmentation of the skin produced by a previous irritation. Skin damage that results in inflammation can induce postinflammatory hyperpigmentation. Common triggers are acne lesions, allergic or irritant contact dermatitis, folliculitis caused by ingrown hairs, scratches, insect bites or trauma. Hyperpigmentation can also develop after cosmetic procedures like chemical peels, hair removal or laser resurfacing.



Melasma is a hyperpigmentary disorder that occurs typically as symmetrical lesions on the face. The cheeks, forehead, upper lip, nose and chin are commonly involved. It affects primarily darker skin type females at puberty or later in life. It is known both for causing significant psychosocial stress and for its difficulty to treat. There is a hormonal component, since episodes of melasma are associated with pregnancy and the use of hormonal birth control.

There have been described several mechanisms that produce hyperpigmentation. Among them is the stimulation of melanocytes by inflammatory mediators (IL-1-alpha or ET-1).

Other known stimulators of melanocytes are superoxide and nitric oxide generated in damaged skin. The melanin produced during inflammation can also enter the dermis, be phagocytosed by macrophages and retained in the upper dermis for a long

time, since the removal of dermal melanin is a very slow process.

The use of hydroquinone has been the first-line treatment for hyperpigmentation. Hydroquinone 1,5 to 2% is available over-the-counter and preparations with higher concentrations have to be prescribed by physicians. The mechanism of action is the suppression of melanin formation by the reversible inhibition of tyrosinase (the main enzyme involved in the conversion of tyrosine to melanin) and the selective damage to melanosomes and melanocytes. Therefore, the mechanism of action of topical hydroquinone is through prevention of new melanin production.

Tip 1. Prevention, prevention and prevention

The most important advice for our patients is always prevention. They must avoid all the known triggers that cause hyperpigmentation. The importance of daily sun protection can't be stressed enough. It not only

plays an important role in the prevention and treatment of pigmentary disorders, the use of sunscreen strongly decreases the rates of skin cancer and photoaging. Still, many patients with skin of color assume that due to the darker skin tone, they can skip sunscreen altogether.

Tip 2. Find the underlying problem

A common mistake among many patients suffering from hyperpigmentation disorders is self-medication without treating the underlying cause. It is imperative to conduct a thorough initial consultation and health history to determine the exact cause of the disorder and establish an early intervention. When the cause is explained to the patients, their compliance with the therapy will increase. We have to inform the patients that in cases of dermal pigmentation, the treatment will be challenging and that perseverance and patience will be imperative.

Tip 3. Combined therapies work better



Multiple studies show that combination therapy is more effective than single agents used alone. Different therapies acting at different stages of pigmentation can produce better clinical results than a single therapy acting at a single stage.

The most used combination therapy for melasma has been the Kligman formula, which combines hydroquinone 5%, tretinoin 0,1% and dexametasone 0,1%. More recently a new combination of hydroquinone 4%, tretinoin 0,05% and fluocinolone 0,01% has been commercialised proving better than any other combination, with 77% of patients showing complete or almost complete clearing.

Tip 4. Use chemical peels with care

Superficial chemical peels are an at-

tractive option because of their few side effects and minimal recovery time. The burning sensation associated with superficial chemical peels is mild, not requiring the use of topical or local anesthetic. Nevertheless, these therapies require extensive experience in its use to prevent the development of irritant dermatitis. In patients with ethnic skin, irritant dermatitis can lead to postinflammatory hypopigmentation or hyperpigmentation.

A clinical trial showed the safety and efficacy of glycolic acid peels on postinflammatory hyperpigmentation in dark skin individuals. The treatment consists in the application of a 2% hydroquinone/10% glycolic acid gel plus the application of six serial glycolic acid peels (68% maximum concentration). This study demonstrated a more rapid and

greater improvement with minimal adverse effects.

Tip 5. Use laser only in non-responding cases

The challenge of the use of lasers in patients with dark skin is to achieve effective treatment with minimal complications. We have to be conservative, with low energy settings, appropriate wavelengths and cautious with the use of cooling techniques. The use of lasers should be restricted to cases unresponsive to topical therapy or chemical peels and an appropriate maintenance therapy should be selected to avoid relapse when treating melasma.

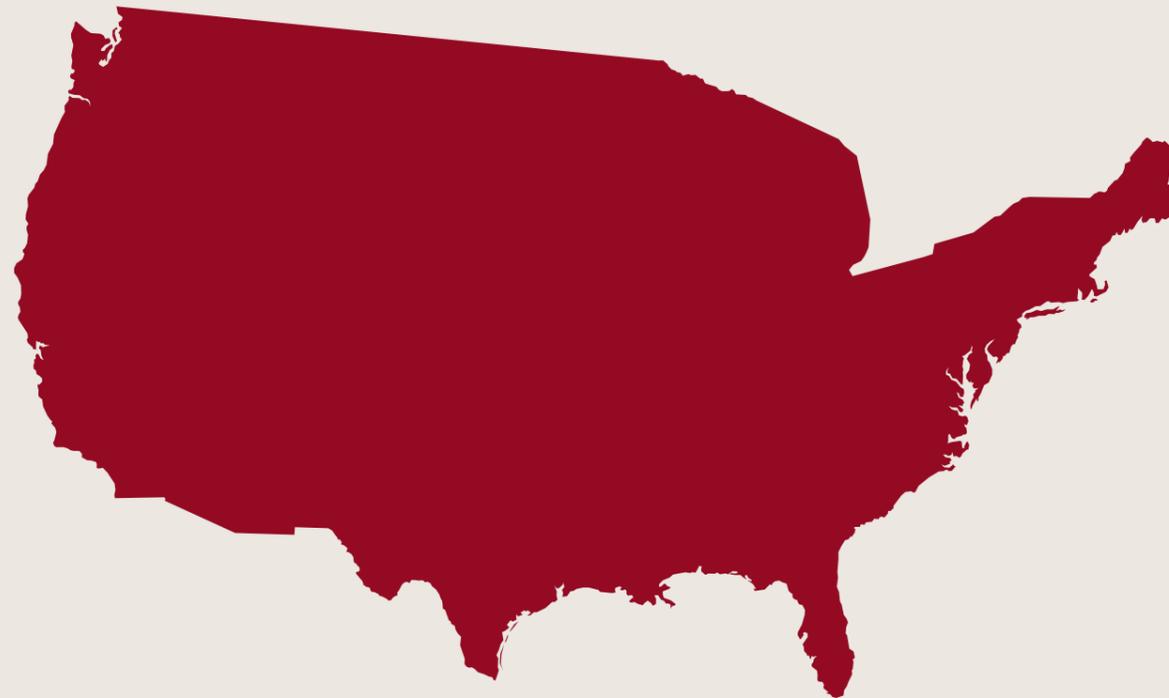
If we decide to proceed with the use of laser devices one of the best option is a Q Switch Nd: Yag laser. It is critical to use at least a SPF 30 sun-

screen before and after the laser treatment and it is also advisable the use of hydroquinone and tretinoin during the treatment.

Dr. Juan Aguiar is a certified plastic surgeon, member of the International Society of Aesthetic Plastic Surgery, the Spanish Society of Plastic and Reconstructive Surgery, and the Skin of Color Society.

He received his training at Vall d'Hebron Hospital, one of the top institutions in Barcelona and completed his cosmetic training in Brazil, Singapore and the USA. He has more than 10 years of experience in the field of cosmetic surgery and since 2014 he has been in charge of the department of plastic surgery at Hospital La Paz in Malabo, Equatorial Guinea.

Expert Directory: United Kingdom, USA & Guinea



United Kingdom

Cosemcare

Elizabeth Bardolph
Liz@bardolph.wanadoo.co.uk
+44 (0) 1329 661 835

www.cosmecare.co.uk

McIndoe Surgical Centre

Mrs Elena Prousskaia
ep@eprousskaia.com
+44 (0) 1342 330 434

www.eprousskaia.com

USA

NYC Plastic Surgery Practice of Adam Schaffner, MD, FAC

Adam Schaffner, MD, FACS
info@PlasticSurgeonInNYC.com
+1 212 481 6696

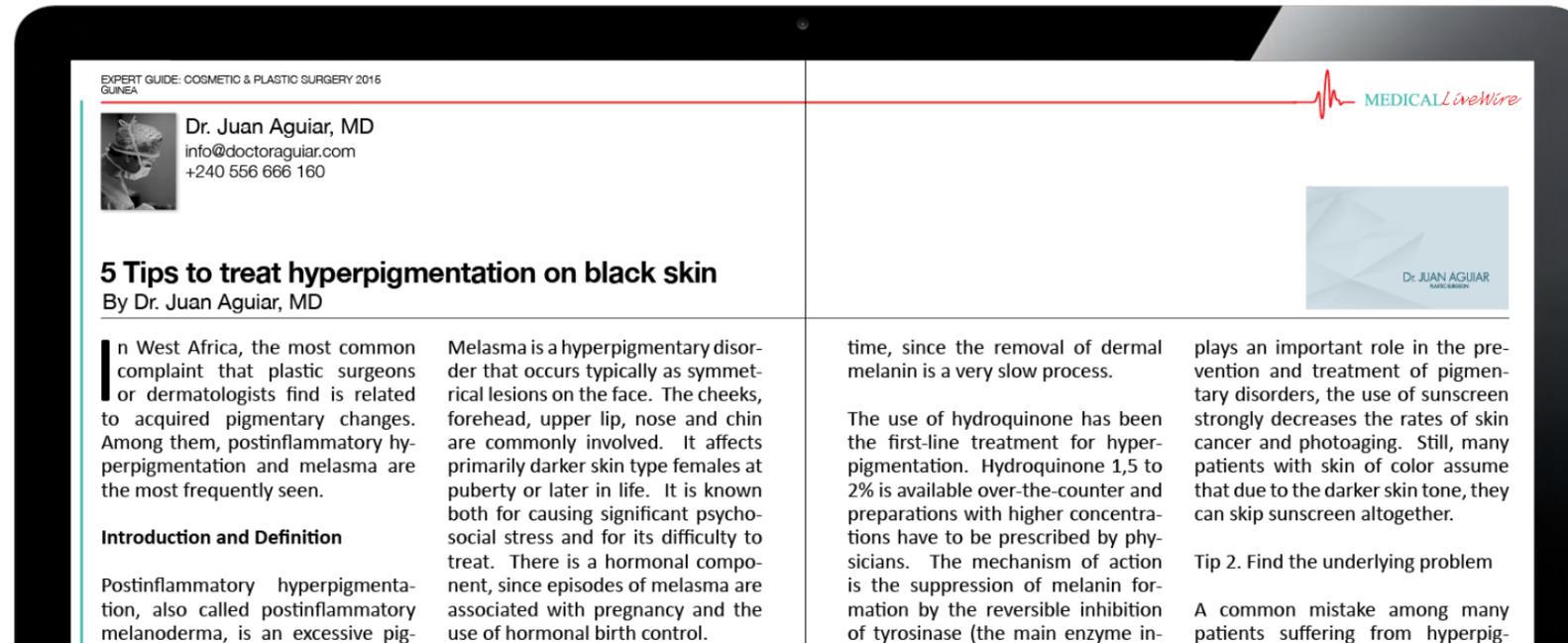
www.PlasticSurgeonInNYC.com

Guinea

Dr. Juan Aguiar

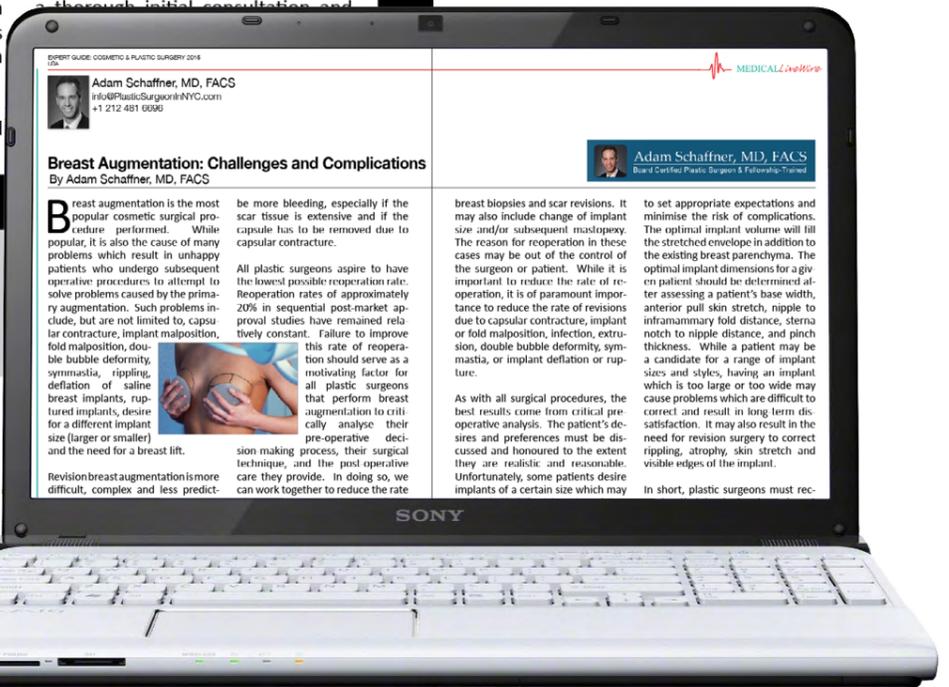
Dr. Juan Aguiar, MD
+240 556 666 160
info@doctoraguiar.com

www.doctoraguiar.com



There have been described several mechanisms that produce hyperpigmentation. Among them is the stimulation of melanocytes by inflammatory mediators (IL-1-alpha or ET-1).

Hyperpigmentation can be caused by sun damage, hormonal changes, and certain medications.



Medical LiveWire Expert Guides are available on all platforms. Access everything from our latest publication to our archived collection through your computer, laptop, tablet or smart phone. It's as easy as one click of the button or a tap of the screen.

MEDICAL *LiveWire*

Wired
Connecting The Corporate World

LuxuryTravelGuide
AN INSIGHT FOR THE AFFLUENT TRAVELLER

CORPORATE *LiveWire*