# Medical Makeup for Concealing Facial Scars

Donna Mee<sup>1</sup> Brian J. F. Wong, M.D., Ph.D.<sup>2,3</sup>

<sup>1</sup>Donna Mee Inc.–Donna Mee Agency, Corona Del Mar, California

<sup>2</sup> Division of Facial Plastic Surgery, Department of Otolaryngology– Head and Neck Surgery, University of California Irvine, Orange, California

<sup>3</sup> Department of Biomedical Engineering, Department of Surgery, The Beckman Laser Institute and Medical Clinic, Irvine, California

Facial Plast Surg 2012;28:536–540.

#### Abstract

Surgical, laser, and pharmacological therapies are all used to correct scars and surgical incisions, though have limits with respect to how well facial skin can be restored or enhanced. The use of cosmetics has long been a relevant adjunct to all scar treatment modalities. In recent years, technical advancements in the chemistry and composition of cosmetic products have provided the patient with a broader range of products to employ for concealing scars. This review will provide an overview of contemporary methods for concealing facial scars, birthmarks, and pigmentary changes without the use of traditional/dated, heavy appearing camouflage products. Additionally, general guidelines and information will be provided with respect to identifying competent makeup artists for care of the medical patient. The article by no means is meant to be a tutorial, but rather serves as a starting point in this allied field of medicine.

(e-mail: bjwong@uci.edu).

## Keywords

- scar camouflage
- facial plastic surgery
- ► cosmetics
- makeup

In the past, individuals with facial pigmentary changes, vascular birthmarks, nevi, and scars had limited options for concealing or camouflaging with makeup. Few cosmetic companies make products (foundations) that provide the necessary coverage to conceal these deformities. Many commercially available products tend to be heavy and thick with the attempt at concealment being rather obvious, as most consumer camouflage products utilize a thick, concentrated cream foundation. Even though these foundations tend to be heavy and thick, several layers are still needed to cover discolorations.

Physicians tend to refer their patients to department store cosmetic counters when asked for makeup referrals by patients regarding the nonsurgical concealment or correction of facial scars, discoloration, and birthmarks. However, retail cosmetic salespersons are seldom trained in the intricacies of medical makeup application techniques, and patients are often disappointed with the outcomes.

The healing process is more than the correction of scars with surgery, phototherapies, and pharmacologics; it is what the patient sees in the mirror that matters most in the end and its impact emotionally and psychologically. Over the past 20 years, the fundamental technology, ingredients, and new application techniques have evolved in cosmetic practice and can enhance the outcome of any surgical technique. This article aims to provide surgeons with a broad overview of these trends and evolving techniques, and also provide guidance with respect to selecting a competent makeup artist with whom to share in the long-term postoperative management of the patient.

Address for correspondence and reprint requests Brian J. F. Wong,

Otolaryngology-Head and Neck Surgery, University of California

Irvine, 101 The City Drive South, Bldg. 56, Suite 500, Orange, CA 92868

M.D., Ph.D., Division of Facial Plastic Surgery, Department of

## Classification

This article will provide an overview of contemporary methods for concealing facial scars, birthmarks, and pigmentary changes without the use of traditional/dated, heavy camouflage products. Additionally, general guidelines and information will be provided with respect to identifying competent makeup artists for care of the medical patient. The article by no means is meant to be a tutorial, but rather serves as a starting point in this allied field of medicine. Topics include the following:

- Types of cosmetics necessary for desired results;
- Formulas that work best based on location of facial scars, birthmarks, or discoloration;

Issue Theme Scar Revision in the 21st Century; Guest Editor, David B. Hom, M.D., F.A.C.S. Copyright © 2012 by Thieme Medical Publishers, Inc., 333 Seventh Avenue, New York, NY 10001, USA. Tel: +1(212) 584-4662. DOI http://dx.doi.org/ 10.1055/s-0032-1325647. ISSN 0736-6825.

- Tools necessary for applying camouflage makeup and concealing facial scars;
- Application techniques for achieving coverage;
- Finding and referring patients to competent makeup artists experienced with camouflage makeup and scar concealment for more satisfactory results.

## **History of Medical Makeup**

There is not a strong history of medical makeup as this is a small niche component of the massive 170 billion dollar global cosmetics industry. There are many terms that are used to refer to medical makeup such as *paramedical makeup*, *postsurgical makeup*, *corrective makeup*, and *camouflage makeup*. Often, these terms are misused. Here are definitions of each to better clarify and define their meanings for medical audiences.

#### **Paramedical Makeup**

Paramedical makeup most often refers to permanent makeup application, also known as tattoos. The most common feature women utilize permanent makeup for is eyebrow makeup and eyeliner. Lip liner is the next most common and blush is the least popular. Alopecia patients who have lost their eyebrows and eyelashes are great candidates for permanent makeup as well as women with trichotillomania. Temporary hair loss from chemotherapy is not generally an indication for tattooing. Paramedical makeup is also utilized to replicate skin tones with tattoo ink for men and women with pigmentation loss. Therefore, vitiligo patients and people with extreme hypopigmentation are ideal candidates. However, very few permanent makeup artists are experienced with this particular application and even fewer actually specialize in it.

#### **Postsurgical Makeup**

Postsurgical makeup is used to conceal bruising, swelling, redness, and other postsurgical changes. Women are often in a hurry to be seen or get back to work and therefore are in need

of concealing the stigmata of surgery. Patients must be careful to avoid makeup application until all incisions are healed and stitches removed to reduce the possibilities of infection.

## **Corrective Makeup**

Corrective makeup creates an illusion of improved bone structure and facial symmetry. This makeup application style draws attention to the best features and de-emphasizes less desirable features. It is based on altering the interplay of light and dark and is better known as *contouring and highlighting*. The same concept is applied to lessen the illusion of raised or indented scars. Nearly all women visually benefit from a corrective makeup application, specifically those with unbalanced or unsymmetrical features such as stroke and Bell's palsy patients. Corrective contours and highlights can also be used to give the illusion of more shape and definition to misshapen features such as a nasal reconstruction from a forehead flap.

## Camouflage Makeup

Camouflage makeup application is the utilization of color theory and or product coverage to hide unwanted facial discoloration. There are many reasons for facial discoloration such as redness, vascular birthmarks, nevi, hyperpigmentation, hypopigmentation, vitiligo, melasma, rosacea, discolored facial scars, and acne scars. Occasionally, a patient may have had poorly applied permanent makeup that they want to cover up. This can be due to poor choice of tattoo color, improper placement, or unsymmetrical tattoo application. The title permanent makeup is a bit misleading; tattoo ink fades and often the ink changes color completely with prolonged sun exposure. Additionally, the ink spreads giving lines a wider, indistinct, and blurry appearance. An illustration of camouflage makeup is shown in ► Fig. 1. ► Figures 1A and 1B depict a client with epidermal melanosis of the forehead and glabellar region from oblique and frontal views respectively. ► Figures 1C and 1D illustrate the use of conservative camouflage makeup, and **Figs. 1E** and **1F** show the result after full makeup application.



**Figure 1** Outpatient with epidermal melanosis of forehead and glabella (a, b), showing conservative use of camouflage makeup (c, d) and after complete makeup application (e, f).



**Figure 2** Patient after four months following multiple stages of a total nasal reconstruction (a), after camouflage makeup application (b), and after corrective makeup (c).

#### **Medical Makeup**

Medical makeup encompasses several forms of makeup application such as postsurgical, paramedical, camouflage, and corrective makeup. These types of makeup application are described above. For the purpose of lessening the illusion of facial scars, both corrective makeup and camouflage makeup concepts combined are best utilized. - Figure 2 illustrates the use of medical makeup to enhance the outcome of a patient who had a total nasal reconstruction using costal cartilage to reconstruct the framework and a paramedian forehead flap for external lining. Four months after flap division, the patient still has persistent edema in the supratip, a broad radix with a visible scar, and discoloration in the forehead where the defect was allowed to heal by secondary intention (**Fig. 2A**). The patient is shown after the application of camouflage (Fig. 2B) and corrective makeup (Fig. 2C). The patient will have further operations in the future aimed at refinement of the skin-soft tissue envelope.

## General Principles for Patient/Client Assessment

Medical makeup is suited for female patients with the following issues: various types of facial scaring such as posttraumatic scars, surgical scars, and severe acne scars; discoloration issues such as hyperpigmentation, melasma, and bad permanent makeup tattoos; skin disorders such as rosacea and vitiligo; facial birthmarks such as port-wine stains, telangiectatic nevus/stork bites, venous malformations, congenial nevi, and café au lait spots.

#### **Indications and Contraindications**

Key points include the following:

- Laser scar removal alone is not always capable of delivering desired results that patients seek. Medical makeup is for women who desire flawless looking skin but have facial discoloration or scaring of various types.
- Medical makeup will enable women to lessen or completely hide the appearance of facial scars, discoloration, and birthmarks.
- Medical makeup is not for patients with diseases or disorders such as eczema, psoriasis, contact dermatitis,

ringworm, herpes simplex type 1, open wounds, or healing wounds.

## Preoperative Management of Referring Patients

Prior to referring patients for medical makeup, it is necessary to find a makeup artist who is both trained and experienced in medical makeup—more specifically, in the ability to apply camouflage makeup. The majority of retail cosmetic establishment staff are not trained or experienced in medical makeup. Additionally, most retail cosmetics do not offer the type of pigment or coverage necessary to conceal major discoloration issues. The following are tips for finding qualified makeup artists.

- Research local makeup artists via Internet search engines to view portfolios for before-and-after images of medical makeup.
- View online makeup artist portfolios on makeup industry Web sites such as:
  - $\circ$  www.modelmayhem.com
  - http://hmartistsnetwork.com/artists
  - $\circ$  http://www.fashionindustrynetwork.com
  - www.photocrew.com
  - www.musecube.com

## **Medical Makeup Brands**

There are many brands of cosmetics that offer the amount of pigment and coverage necessary to deliver good results in covering birthmarks, discoloration issues, and scars. The following brands are recommended: Cover FX (Toronto, Ontario, Canada); Dermablend (a division of L'Oreal USA, New York, NY); CoverBlend (Neostrata, Princeton, NJ); Colorescience (Dana Point, CA); Kevyn Aucoin (Kevyn Aucoin Cosmetics, New York, NY).

Depending on the location of the scar, birthmark, or discoloration, a different formula of concealer or camouflage cream may be needed. Skin around the eye is much thinner and drier than that of the rest of the face. Therefore a creamier product or one with more moisture is necessary to give best results. There are three different techniques used for concealing or camouflaging facial discoloration, scars, and birthmarks. They are referred to as "band-aid theory," "color theory," and "the science of light and dark" also known as *contouring and highlighting* in the makeup industry. All three techniques and variables are described in the following paragraphs.

## **Medical Makeup Tools**

Besides the actual cosmetics, certain tools are necessary for working with medical makeup. A variety of synthetic makeup brushes is best to use when applying wax-based cream concealer and foundations used for camouflage makeup. High-quality latex sponges are also a basic staple along with other disposable items like cotton swabs and cotton pads to remove makeup. An airbrush system is often used for medical makeup. This would consist of an airbrush gun suitable for makeup and a compressor with a PSI setting as low as 5.

## **Premakeup Application**

- Prepare the face by massaging a cream or oil facial cleanser. Massage it in a circular motion on a dry face and neck to break down any dirt, oil, and makeup. The amount of cleanser will depend on the amount of makeup on the face.
- Rinse entire face and neck with a warm washcloth.
- Follow facial cleanser by applying an alcohol-free toner on a cotton pad and swiping across the entire face and neck to remove any excess cleansing product.
- On a clean, dry face, apply a facial moisturizer and eye cream.

## **Makeup Application**

# Color Theory Technique to Camouflage Slight Discoloration

 Using a synthetic makeup brush, apply a sheer to medium coverage concealer that is the opposite color of the discoloration. (See the color wheel in – Fig. 3 for opposite color tones.)



Figure 3 Color wheel used in makeup application.

- Brown is not on the color wheel. Therefore for brownish discolorations, determine if it is a golden brown or a cooler ash (gray) or taupe brown.
- Use an orange tone to conceal hyperpigmentation/melasma, which most often appears to be an ash (gray) brown. Because ash brown is a cool gray, brownish orange is the warmest color to counteract the discoloration. This is known as *color theory concealing*. Make sure that the color used is within the same lightness or darkness of the skin.
- Once the area of concern is neutralized, foundation should be applied to the entire face by hand or with an airbrush.

#### Color Theory Technique and Band-Aid Theory to Camouflage Dark Discoloration

- Using a synthetic makeup brush, apply a sheer to medium coverage concealer that is the opposite color of the discoloration.
- Use an olive (yellow-green) tone to conceal a red-violet birthmark. This will neutralize the reddish-purple color. This is known as *color theory concealing*. Make sure that the color used is within the same lightness or darkness of the skin.
- Once discoloration is lessened with color theory concealing technique, apply another layer of a full coverage (opaque) concealer or camouflage product that matches the skin tone. This is referred to as *band-aid theory*.
- Blend the outer edges of the concealers to create a thinner coat of product to fade unnoticeably into the skin.
- Once the area of concern is neutralized, foundation should be applied to the entire face by hand or with an airbrush. When applying a cream foundation, avoid the typical blending downward motion. Instead, apply the cream foundation with a sponge by using a stippling technique. Stippling is done with a pressing and rolling motion.
- Apply loose face powder to the covered area to set the makeup.
- The amount of loose face powder used will be in relation to how thick the concealer or camouflage product was applied, and the consistency of the product.

#### Science of Light and Dark Technique for Indented Scars

- When facial scars have indentations, an additional technique known as *highlight makeup* is necessary.
- Highlighting is the utilization of makeup that is one to two shades lighter than the skin delicately placed in the indented areas.
- Light colors give the illusion of pulling forward where applied, giving the indented areas the illusion of a smoother appearance.
- Highlight can be a cream concealer applied with a synthetic brush or can also be used in the form of a concealing pencil to draw in the indented areas.

#### Science of Light and Dark Technique for Raised Scars

• When facial scars have raised areas, an additional technique known as *contour makeup* is necessary.

- Contouring is the utilization of a shade of makeup that is slightly darker than the surrounding skin.
- Dark colors give the illusion of recession where applied, providing the raised areas the illusion of a smoother appearance. Therefore a shade of makeup slightly darker than the skin should be applied to a raised scar. The same technique should be used to help camouflage puffy areas to reduce the illusion of swelling.
- Applying foundation with an airbrush is also very beneficial for patients with raised scars because an airbrush compressor blows an ultrafine mist onto the skin. This allows the textured skin areas to get a very even coat of color, whereas old fashioned "by hand" application applies the most pressure to raised areas that need the most coverage, which happens to be counterproductive.

## Science of Light and Dark Technique for Reshaping Features

- Imagine the face is a clay sculpture. Envision how you wish to reshape a feature; anywhere you would push or sculpt off clay would need a darker color (contour) and anywhere you would add clay would need lighter color (highlight).
- Light colors give the illusion of bringing forward the area where applied. This will give an indented area the illusion of a smoother appearance.
- When highlight is placed on nonindented areas such as a nose bridge, it will make the nose bridge appear more prominent.
- Dark colors give the illusion to recede where applied, giving the raised areas the illusion of a smoother appearance.
- A shade of makeup slightly darker than the skin should be applied anywhere you wish to give the illusion of more depth.
- Using a slightly darker color will help to camouflage puffy areas to reduce the illusion of swelling.

# Postmakeup Application/Makeup Removal

• Prepare the face by massaging in a cream or oil facial cleanser. Massage it in a circular motion on a dry face and neck to break down any dirt, oil, and makeup. The amount of cleanser will depend on the amount of makeup.

- Rinse entire face and neck with a warm washcloth.
- Follow facial cleanser by applying an alcohol-free toner on a cotton pad and swiping across the entire face and neck to remove any excess cleansing product.
- On a clean, dry face, apply a facial moisturizer and eye cream.

## Side Effects/Complications

- Surgical patients must not apply makeup in any form until all wounds, stitches, and scabs have completely healed.
- There are no side effects of wearing medical makeup.
- If a patient experiences redness, breakouts, itchiness, or any sort of irritation, then the patient's skin has sensitivity to some ingredient(s) in the products used. In this instance, different makeup and skin care products should be used.

## Keys to Success and Pearls to Remember

- Refer patients to a makeup artist with experience in medical makeup.
- Ask to see before-and-after pictures of the artist's work to ensure their skill.
- Analyze level of discoloration and skin texture to determine which makeup application technique to utilize to deliver the best coverage results possible.
- Utilize medical makeup brands like Cover FX, CoverBlend, Colorescience, and Dermablend or the Sensual Skin Enhancer cream foundation from Kevyn Aucoin.

## **Recommended Reading**

- 1 Edward B. A Course in Mastering the Art of Mixing Colors. New York, NY: Tarcher; 2004
- 2 Kidd J, ed. Jemma Kidd Makeup Masterclass. New York, NY: St. Martin's Press; 2009
- 3 Seidel L, Copeland I. The Art of Corrective Makeup: How to Camouflage Unattractive Scars and Blemishes. New York, NY: Doubleday; 1984
- 4 Riordan T. Inventing Beauty. New York, NY: Broadway; 2004
- 5 De Castelbajac K. The Face of the Century. New York, NY: Rizzoli International Publications; 1995