Lights, Cosmetics, Action: The Jaundice Case that Doesn't Clear

by Tim Collison, CFSP

Despite all of our best efforts, we are all going to encounter a body that is jaundiced, doesn't clear during the embalming, and is going to be viewed. This type of discoloration is probably the most common that the mortuary cosmetologist will be required to deal with. The procedures prior to and during the embalming can help the success of the cosmetic treatment immensely, by helping to alleviate some of the staining that will remain after the arterial injection.

The intensity of the jaundice, as well as the length of time that the individual has been jaundiced, determines the success that the embalmer will have in clearing and reinstating normal complexion coloration. Acute jaundice, which has a relatively quick onset and short duration prior to death, is the most easily cleared and the type that "jaundice solutions" are most successful with. The bilirubin is primarily in the capillaries and arterial and co-injection chemicals will often move the yellow coloration out during the embalming. Chronic jaundice is the gradual build-up and long-term presence of bilirubin. The duration of its presence in the circulatory system allows it to infiltrate into the interstitial spaces of the cells, ending up in the dermal and epidermal tissues. This staining effect is similar to the type of post-mortem staining we see in bodies that have been deceased for a long period of time: blood that has accumulated in dependant areas can't be cleared while embalming.

Since most of the time embalmers don't have the luxury of knowing how long a person has been jaundiced, it may be difficult to predict the success of clearing the discoloration. There are a few clues that the embalmer can look for that the jaundice has been long term. The sclera of the eyes is stained a deep yellow. During the bathing of the body prior to embalming, yellow residue comes off the skin surfaces. When wiping the body with Webril towel, yellow pigment is visible on the towel. All of these examples should tell the embalmer that they will have difficulty clearing the discoloration during the arterial injection, and that stronger measures should be considered.

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There are procedures that the embalmer can use to make it easier for the cosmetic application. One is to make sure that as much of the yellow coloration as possible is removed from the body prior to beginning the embalming. Bathing the body using warm water and Germasidol soap will remove pigmentation that has passed through to the skin surfaces, as well as stimulate the capillary beds for better profusion of the preservative solution. Another adjustment to consider is the use of a more intense dye concentration than normal. The old adage of "make them redder than they are yellow" has some veracity. If the discoloration is not going to clear, the embalmer can attempt to overcome the yellow discoloration by 'overstaining' it with red tones. Jack Adams has written extensively on this subject, and you can review his ideas on the Dodge website library at www.dodgeco.com.

The overall objective for the embalmer is to remove or disguise as much of the discoloration as possible while thoroughly preserving the remains. A jaundiced body that has been embalmed using a weak preservative solution containing a high concentration of dye may look presentable for a short period of time, but the lack of preservation will cause problems until the casket is finally closed, and the problems may not stop there. As the body is jaundiced to begin with, the ability of the injected preservative solution to work as it normally does is already compromised. What is required is good thorough preservation while working toward the best result of clearing of the stain using the previously mentioned methods.

There are different levels of cosmetic application that can be used on jaundice cases just as in any other situation. Even when working with a body stained with jaundice, the cosmetologist should attempt to use the least amount of cosmetics possible. I recently viewed a body that had been

jaundiced but then quite successfully embalmed using a higher than normal amount of Icterine dye included in the arterial solution. The embalmer had achieved good saturation of the tissue with the injection, which resulted in the majority of the face being reddish in tone. There were however areas around the mouth and areas of the forehead that still showed yellow. Rather than resort to using an opaque cosmetic over the entire face to cover the yellow areas, Complexion Cream Light was first used to even out the base complexion color. This is a semi-opaque cosmetic that can be extended when it is applied to the point of semi-translucency.

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The cosmetic was applied in a manner where the areas of the face that weren't discolored were not heavily cosmetized, and natural facial markings could still be seen. The cosmetic also acted to soften the redness that had been created by the high dye content in the arterial solution. In the areas that were discolored, the base cosmetic reduced the discoloration and established a consistent base color with the rest of the face. To finish the procedure, a blend of heavier Kalon Pigments, Natural and Suntan were then used to completely hide the discolorations.

The opaque pigments were blended into the surrounding skin surfaces and lines of demarcation were then removed by reducing the amount of cosmetic on the brush. This was done by cleaning the brush on Webril toweling as it moved from the opaque area onto the skin surfaces where the Complexion Cream had been applied. A very light application of the Complexion Cream Light was then used over the discolored areas to create a uniform complexion color. The final procedure was the use of a powder duster to apply Kalon Brunette Powder which set the cosmetic and removed the shiny appearance.

The lighting that is used in the room where the body is going to be viewed can make a dramatic difference in the appearance of the jaundiced body. As more funeral homes adopt the use of direct lighting, i.e. eyeball spots or canned lighting, the choice of which type of bulbs to use and the use of rheostats becomes more important. To understand this we need to have a clear understanding of how various colors in lighting affect the object they are reflecting on.

No artificial light can produce all of the wavelengths that natural light does. This is why the best re-creation of natural lighting is done using a combination of bulbs that can produce yellow, blue and red wavelengths. Probably the most commonly used bulb is the incandescent flood. What we need to keep in mind when we are illuminating the jaundiced body is that incandescent lighting is already high in the yellow wavelengths and very low in the blue wavelengths. The fluorescent lighting with cool-white bulbs that is used in most preparation rooms is high in the green and blue wavelengths. Both types of bulbs are low in red wavelengths which explain the common use of red neck bulbs in torchiere lamps and pink overhead lighting. What this means is that incandescent lighting will reflect (enhance) the appearance of yellow when it is lighting a yellow object (the jaundiced body). If you have a body that appears lightly jaundiced in complexion color under the fluorescent lighting in the preparation room, it will appear more yellow when it is placed under incandescent lighting in the reposing room. This is also the reason you have difficulty telling the difference between a navy blue suit and a black suit in your closet.

A few weeks ago I was visiting a funeral home and the owner asked me to look at a jaundiced case he had in a visitation room. The body was moderately jaundiced, and while cosmetics had been applied to minimize the yellow appearance, he pointed out that under his lights the hands looked pretty good, while the face still looked quite yellow even after the cosmetic application. His lighting consisted of torchiere lamps with red neck bulbs, as well as track lighting over the casket area using incandescent floods as well as a blue and pink flood. What we noticed was that by refocusing the track lighting so that the blue and pink were directed on the face, it greatly reduced the yellow appearance of the complexion color. We also noticed that by taking the blue and pink lighting off the hands, they now appeared much more yellow than they had previously. In this case, the incandescent bulbs, which in most cases produce the most natural indoor illumination on the deceased, were not needed at all, and actually had detracted from the appearance of the body.

A good basic bulb choice for use in track, canned and flood lighting is the blue-white version that has been available for several years now. Under the GE brand they are known as Reveal. This type of light has the blue component that incandescent bulbs are very low in. They also enhance the red tones much more than incandescent bulbs so adjustments to the amount of warm color that the cosmetician uses may have to be made.

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The jaundice case needs to be treated differently from the moment the preparation begins. The embalming and cosmetology are not mutually exclusive, but a collaborative and synergistic effort. With the life extending procedures that are common in contemporary health care, as well as the number of liver and kidney related illnesses we hear about daily, we can be assured that jaundiced cases are not going away, but will probably increase. We, however can do a good job for these families, and help them focus on the deceased and not the disease.

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