

to cosmetize more heavily than desired. Sometimes when injecting the right carotid downward, the right side of the head will also show signs of distribution. It is recommended on such cases to at least inject a small amount upward on the right carotid. This will at least flush any blood that might exist on the right side and prevent any loss of color the following day. This flushing action not only removes any blood but it also delivers a more even color to the right side of the face to closer match the skin tone of the left.

Raising arteries is always the option to go to when achieving even fluid distribution for a thorough embalming. A routine of injecting one artery or utilizing a one point injection regardless of the tissue condition can be a dangerous one. One point injections on difficult cases can be temporary embalming, at best. Sometimes funeral plans change and temporary preservation won't make it. Raising arteries isn't old fashioned, it's distribution insurance.

The value of viewing is being questioned and good viewing experiences start with controlling the head during embalming. There is no doubt that the face is the most important part of any viewing and it's time we treated it as such. Controlling the strength, the amount, and the color of solution to each side of the head is essential for head control. This is best accomplished by raising both carotid arteries as needed during the embalming procedure. Whether raising both carotids initially or raising one to begin with followed by the other carotid when needed, controlling the head depends on managing both carotids.



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# Dodge



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## Head Control

by Jack Adams, CFSP, MBIE

Traditional funerals and especially those with viewing are not only decreasing in number but it's becoming more difficult to make them a pleasant experience. People living longer and medical miracles, with prolonged therapies and drug use, contribute to the increase in the number of difficult embalming cases. Our client base is demanding to see value in our services and some traditional families are opting for alternative methods of celebration.

We embalmers are now exposed to the difficult case on a regular basis. Swelling, jaundice, emaciation, organ/tissue donation, and conditions causing tissues to deteriorate have now become common challenges to the embalmer. Analyzing the condition of a remains can be critical. Obvious conditions like extreme edema can readily be identified, but the emaciated case that was extensively treated with drugs can sometimes be just as difficult to preserve with its spongy tissue and atrophied condition.

Artery selection can be up to an embalmer's preference,

something that has been learned, a routine selection, or almost a prep room policy that started with grandpa and has been followed by all the embalmers in the firm ever since. There are some embalmers who might spend more

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time injecting additional volume of solution to avoid raising additional vessels. Some of this is because they never developed a method of raising the vessel that was easy and consistent. Students should be encouraged to raise arteries and use a hypodermic trocar on a “last but not least” procedure to preserve. Because the head is the most visible and most important part of the body, it is also the most important to control when injecting. Edema, emaciation, jaundice, and medical treatments which can cause physical distortions and discolorations to the facial tissue are best handled by controlling the injection to the head. This is not a new method of injection and you’ll find it in your embalming books as restricted cervical injection. Restricted cervical injection is a method of utilizing both carotid arteries for consistently controlling the head and preventing complications caused by injecting without controlling the head. Utilizing both carotid arteries for injection has been around for a long time. In recent years, it has become more popular and practical because of the increasing number of difficult cases.

Many difficult cases call for several injection sites and different solution strengths at those sites. A body can appear normal but have severe edema in the lower extremities or swollen arms and hands. These edematous, spongy tissues demand stronger solutions to be adequately embalmed and to prevent unpleasant experiences such as leakage or decomposition. There are times that the head is very distorted because of the way it was positioned or the method of wrapping the body at the hospital. Sometimes the head is severely swollen on one side during life because of fluid gravitation and the position of the head. After death these distortions or fluid imbalances are exaggerated by time, weight, and position.

A remains that is extremely edematous in the left side of the head with moderate edema to the right can be treated with separate solutions for maximum embalming results. In such a case it is always a benefit to use a restricted cervical injection to control the amount of fluid injected into the head and to choose the strength and drying capacity for

each side of head. If a case is difficult with distortions to the face, I’d choose to inject the worst side first, especially if it is edematous or emaciated. If you inject the worst side of the head first, it will allow the super solution time to begin its work and it will allow the embalmer time to multitask when injecting downward into the trunk of the body.

Multitasking, or conducting concurrent embalming procedures, could include channeling for edema or, perhaps, feature building for emaciation. The embalming plan becomes specific for body parts and tissues and the restorative procedures can be started after the head is injected. This type of plan can not only be very effective but can solve some of the time management problems we have with busy schedules and difficult cases. In a way, it’s like the embalmer is taking control of the case and the time allotted for the case, instead of performing the usual normal injection and reacting to the sometimes not-so-good results and running out of time.

The emaciated case can be treated by injecting the head first with a solution used to bulk the facial tissue while achieving a thorough embalming. Some cases that are emaciated have been treated with chemotherapy that can have a neutralizing effect on the preservatives used and

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this type of case will demand a stronger solution. Once you’ve determined the strength of the solution, you add an additional amount of a bulking chemical or humectants that give the appearance of a controlled, even swelling to the facial tissue. Restricted cervical injection, or controlling each side of the head, is definitely the way to go for good results with restoring extreme emaciation.

Normally these cases are what we’ve heard called “skin and bone.” It is not uncommon to build tissue ¼” or more. This bulking procedure is the factor that allows an embalmer to successfully raise the tissue of the face to a normal level while still maintaining natural lines. Without this step, the face that is “skin and bone,” might resemble a balloon following feature building. That is, it might appear puffy or unnaturally stretched, like from a botched Botox treatment or plastic surgery. There will be no identity lines and while overall the head might be the right size, it will not resemble the photo of when the person was a little heavier with the important identity lines and recognizable nasolabial folds.

Restricted cervical injection works well for jaundice cases. Isolating the head and delivering the proper fluid strength and color all depends on proper head control. Avoiding unnatural green can be insured if the embalmer is aggressive enough to control the head and inject with a solution that will preserve and has enough dye to dominate any jaundice discoloration. This works well if the head is injected first and the dominant color is established to both sides of the face. Once the more natural color has counter-stained the jaundice, the embalmer ties off the carotid to lock in the new color. The embalming of the trunk and lower body would follow this restricted cervical method.

Trauma cases demand stronger solutions, especially when there is trauma to the head. To be successful, head

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trauma should be injected with a strong solution that is firming to the tissue (head freeze). This firm tissue is needed for facial restoration. The head might need to be injected with a strong waterless solution and once it’s well-embalmed, the lower body can be embalmed with a milder solution. If any other parts of the body show signs of trauma or decomposition, the waterless or stronger solution should be utilized.

Organ donation cases should be treated as trauma cases, the only difference being areas of raw tissue which are caused by medical science and not trauma. A stronger solution would be injected or hypoed into the procurement site, while the head can be injected with a normal strength solution to avoid over-embalming or dehydration.

Obese cases are best treated by controlling the head. The use of one injection site, such as the right carotid, can cause the left side of the head to become over-injected, while the body needs further preservation. Of course, when any case has enough fluid distribution to the head, the left carotid artery should be raised and clamped off to slow down the main flow to the left side of the head. The head should get extra attention and consideration, making sure it gets good distribution but not too much on either side.

Sometimes an over-injected head will have a dye line down the center of the face when the left side has received far more solution and color than the right. The uneven distribution will often require the embalmer