



Expanding Encyclopedia Of Mortuary Practices

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**LATEX DANGERS IN EMBALMING:
A Report for Funeral Service Practitioners
Part 3
By: James H. Bedino, Chemist/Dir. Research
The Champion Company**

SOLUTIONS: An excellent alternative is to consider the use of a synthetic glove to eliminate all the problems associated with latex gloves. If that is not possible, eliminate powder in latex gloves and consider the use of cotton underliners when using latex. Use only the highest quality, more expensive latex gloves that are well leached and washed during manufacture, contain no powder and are gel-coated for further protection. To achieve chemical protection during embalming, only the thicker latex gloves will suffice. This will definitely limit the tactility and dexterity for the user. The superior alternative appears to be substitution with a replacement synthetic glove. This will eliminate all the problems associated with latex and provide chemical and body fluid barrier protection simultaneously. Synthetics are usually well washed and leached during manufacture and contain much less residual chemicals than typical latex gloves in current use. There is a small chance, however, that highly allergic individuals may still manifest contact dermatitis from the residuals that are present even in synthetic gloves. If this occurs, then cotton liners may be indicated or choice of a different synthetic glove or manufacturer may be required. Synthetic gloves, in general, exhibit only a fraction of the allergic potential of latex and are acceptable for an overwhelming majority of users.

There are numerous alternative synthetic material gloves that are available to the embalmer. All eliminate the latex problems but do not necessarily serve as a acceptable or superior substitute to what was being previously used. A summary of synthetics that are available is delineated in Table 1. Synthetic gloves are just that, a synthetic man-made polymeric material that is not natural rubber, but still exhibits some or all of the attributes of natural and latex rubber materials. Even though some are called rubbers — they do not contain latex or natural rubber.

Vinyl was initially thought to be a good substitute for latex in health care but has now been found to have more porosity and permeability than latex and is now not recommended for use where barrier protection is required. This failure of vinyl results from the manufacturing process of the glove and is inherent. Vinyl is not acceptable for embalming uses.

The special requirements for embalming uses that demands both chemical imperviousness with adequate blood-borne barrier protection reduce the choices of latex substitutes to butyl rubbers, nitrile rubbers, neoprenes and PVC's. Butyl rubber (butadiene or styrene butadiene synthetic polymer) is a good choice for embalming with high chemical resistance and good abrasion resistance. Nitrile gloves (nitrile butadiene) are overall excellent for embalming purposes with high resistance to most chemicals, excellent durability and cut and abrasion resistance along with reasonable stretchiness and tactility. Nitrile gloves are my personal choice for embalming operations. Neoprene (polychloroprene) is a fair to good substitute with good chemical imperviousness and moderate abrasion resistance. PVC gloves are a fair to good alternative to latex gloves in embalming. PVC is a polyvinylchloride thermoplastic polymer that has good chemical resistance and good abrasion and cut resistance but are usually only available in a work style glove that are thick and bulky and not amenable to embalming operations.

Other synthetics that are available in the market are not acceptable for embalming for various reasons. Viton gloves are a fluoroelastomer glove that has extreme chemical resistance but poor cut and abrasion resistance — making it a poor choice for embalming. PVA (polyvinylalcohol polymer) gloves are not suited for embalming as they are not to be used in a water-based solvent situation which is the very nature of embalming procedures. 4H gloves are an ethylenevinyl alcohol polymer that have good chemical resistance but are not durable and not a good choice for embalming. Finally, SilverShield gloves are popular in the synthetic glove market and they do deliver excellent resistance to chemicals but minimal resistance to cuts and abrasions — not a good choice for embalming. When selecting a synthetic substitute for use in the embalming room, consider chemical imperviousness, tested bloodborne pathogen barrier protection, ability to resist cuts and abrasions and tactility and workability of the glove.

SUMMARY: With all the health problems and lack of chemical protection that occurs with the use of latex gloves in general — the use of latex gloves in embalming operations is not recommended and appropriate alternative gloves should be used in their place. Latex gloves may be used during housekeeping chores (general cleaning, etc.) and where no chemical exposure may result (such as first call, dressing, etc.) if they are high

TABLE 1	
SYNTHETIC GLOVES FOR EMBALMING USE	
GLOVE MATERIAL	RATING
vinyl	poor
butyl rubber	good
neoprene	good to fair
nitrile	excellent to good
Viton	poor
PVC	good to fair
Silver Shield	poor
4H	poor
PVA	poor
<i>See accompanying text for detailed discussion of each glove and its acceptability.</i>	

quality, low allergenic protein content, well washed and leached and powder-free. Acceptable synthetic gloves for embalming purposes and all other funeral service related duties would be chosen from the following list: nitrile, butyl or neoprene and possibly PVC. Considering all factors involved in embalming and funeral service — nitrile based gloves are my personal choice and recommendation.

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Note: For purveyors of the Web — There are numerous sites devoted to latex allergy patients and latex dangers in general and action groups of various kinds. I suggest you peruse THE RUBBER ROOM and branch out from there.

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