An Inexpensive Method of Labelling Plastinated Specimens

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Abstract

A simple and inexpensive method is presented to mark and identify silicone plastinated specimens to aid cataloging and control. Labels are hand cut from a computer generated paper sheet and fixed in appropriate places on specimens by silicone adhesive. An additional layer of silicone over the whole label gives added protection from handling.

Introduction

In many countries, the disposition of anatomical specimens from human origin is regulated by law. As plastination becomes easier to perform and its use becomes more widespread, it is necessary to keep track of specimens, both within an organization and between institutions when they change hands. In addition, for research purposes, it is often important to know the origin of the specimen, and, especially in the case of pathological specimens, to know the cause of death and other pertinent data.

Specimens can be small, making tagging methods difficult. In addition, it can be necessary to identify tiny structures. At least two methods have been presented previously (Jackson, 1987; Pretorius, 1997), each with benefits. This paper presents a simple and inexpensive method which we have found useful.

Materials and Method

By means of a word-processing program (QuarkEXpress™ 4.0) a series of labels was prepared on a computer (Apple Power Macintosh G3). The overall size of the label was made small enough (3mm x 12mm) to fit on expected specimens, yet large enough to allow legible printing. A six-figure number (in 7.1 point type) was determined to be large enough to handle a goodly number of specimens over time without changes in label length. In smaller type (3.5 point) the name of our laboratory was placed beneath (figure 1). A bullet was printed on both ends of the label to call attention to accidental clipping of either end during label cutting out or trimming. Table 1 describes the printing parameters.

A page of labels was then printed on common ink-jet paper (figure 2). Since the numbers were identical (as shown), sequential numbers were first created on the computer screen. This requires some patience, as it is done one at a time before printing.

As each specimen is prepared, one label is cut out with common scissors. It is then attached to the previously plastinated specimen by clear silicone cement (Dow Corning Corp., Midland, MI 48686-0994 USA, catalog number 698) from a 30ml. tube obtained at a home supply store. A location for the label is selected, a smear of adhesive is applied to the specimen while using protective gloves. Using tweezers, the label is pressed into the silicone and a cover layer of silicone adhesive is applied to seal the label. Setting of the adhesive takes place in a few minutes and curing is complete overnight.

As each label is attached, a corresponding page is created in a record book, describing the sample's origins (age, sex, cause of death, etc.), how it was prepared, its disposition (where it is and who is responsible for it), and its subsequent use or treatment (teaching purposes, subsequent research information, etc.)

Results

We have found the labels to be small enough so they may be easily placed (figure 3). They are legible and adhere well. If one should come loose in a spot or two, another layer
of silicone adhesive will secure it. Labels are easily read. It is reassuring to have a record of specimens to demonstrate legal responsibility for them and to have a method for recording information about plastinated specimens which may be traced to each item.

**Discussion**

Such pains may seem unnecessary in the early stages of a plastination laboratory but specimens accumulate. Changes of preparation procedure, location of specimens, and success or failure of their use can be tracked by faithfully attending to identification of plastinated specimens. As the laboratory grows, with possible additions or changes of personnel, a permanent specimen record will exist.

**Bibliography**


**Table 1. Printing parameters.**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Window (box) size:</td>
<td>H = 0.517&quot;; h = 0.171&quot;</td>
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<tr>
<td>Font:</td>
<td>Helvetica</td>
</tr>
<tr>
<td>Numbers:</td>
<td>7.1 point</td>
</tr>
<tr>
<td>“NCC Plastination Laboratory”:</td>
<td>3.5 point (Absolute) leading: 4 points</td>
</tr>
<tr>
<td>Magnification:</td>
<td>400%</td>
</tr>
<tr>
<td>Step &amp; repeat:</td>
<td>0.375” x 0.750”</td>
</tr>
<tr>
<td>Actual (cut) label size:</td>
<td>3 x 12mm</td>
</tr>
</tbody>
</table>

**Figure 1.** One enlarged label.  
**Figure 2.** A series of labels, actual size as printed. (Note: The label borders are shown for clarity here, but are not actually printed.)  
**Figure 3.** A label applied on a specimen.