HISTOPATHOLOGY SPECIMENS

Pages with reference to book, From 51 To 51 Serajuddula Syed (Department of Pathology, Sindh Medical College, Karachi.)

A tissue (biopsy) undergoes autolytic changes the moment it looses its blood supply. Therefore, the most important factor in achieving a meaningful histopathology report is "Proper Preservation" of the biopsy specimen. This is specially so in Pakistan where climatic conditions are on the warm side for most part of the year. There are several buffered preservative solutions in which a biopsy can be fixed (preserved). The most common are those which use formaldehyde as preservative. Following formulae are used: These preservative solutions are suitable for most procedures i.e., processing and special stains. They are simple to make and economical. Ideally the amount of buffered formaldehyde solution should be 10 times the volume of the specimen. When this is not possible e.g., large specimens, then the specimen should be completely submerged in the preservative solution and delivered to the histology laboratory immediately. If the specimen is not properly preserved the quality of sections is compromised both in terms of thickness stains intensity making reporting difficult. A detailed clinical history is always useful. It is in fact essential for biopsies of liver, kidney and bone. The latter must always be accompanied by relevant x-rays. A simple telephonic conversation with the histopathologist solves many problems and queries resulting in a meaningful histopathology report. The most important 'do not do' of histopathology is the "splitting" of biopsy specimens. This is the dividing of anspecimen in two or three pieces and sending them to different histopathologists. This procedure is dangerous since a solid tissue (biopsy)

A Formal phosphate	B Formal saline
Recipe - A	Recipe - B
Formaldehyde 10	0 ml Formaldehyde 100 ml
Deionised water 90	0 ml Deionised water 900 ml
Sodium dihydrogen	Sodium chloride 9 gram
phosphate monohydrate 4 g Disodium phosphate 6.5 g (Anhydrous)	

will never show similar histological appearance in sections made from different areas. For example an area may contain cancer and others may be normal or an area may show inflammation while others may not. This unfortunate practice in Pakistan has lead to many conflicting, yet correct reports. This inevitably causes confusion, leading to sociopsychologi.. cal problems for the patient, relatives and the concerned clinician and hence delaying proper management and care.