The measurement of distances, angles and areas on a plane, especially on a map or image.

1/2

There are different methods available to estimate tumor volume. So far, planimetry is the most accurate one. To perform planimetric measurement, traditionally, physicians need to segment the tumor on each image slice and then calculate the cumulative volume enclosed by the segmentation. Although accurate, it is usually time- and labor-intensive. With recent advances in imaging algorithms, some software can now segment tumors semiautomatically: physicians need to only manually outline the tumor on a small number of image slices, and the software could automatically identify the tumor on the slices in between (interpolated segmentation). This function has greatly benefitted clinical work, but it is not without limitations. The major one is that electronic DICOM data is necessary for such measurement; in certain work settings, however, such DICOM data may not be accessible. In such cases, simple measurement methods that can be performed directly with images physically stored in printed form are desired. Among all methods proposed so far, an ellipsoid-based method named 1/2ABC is mostly studied/used. This method was initially proposed for intracerebral hemorrhage; with time, it was also used to calculate volumes of other intracranial lesions, including epidural hematoma, subdural hematoma, vestibular schwannoma, glioma, infarction, and arteriovenous malformation ¹¹ 2^{1,31,41,51,61,71}

1)

7)

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