Summary. The angiographic sylvian point (ASP) is one of the most useful landmarks on cerebral angiograms for detecting retrosylvian masses. Although it is suggested to be the halfway point on the clino-parietal line (CPL), its exact normal position has not been defined. The lateral carotid angiograms of 100 consecutive patients from 22 to 65 years of age were used to study the normal ASP in relation to the CPL. Patients with severe neurological deficits or angiographic evidence of hydrocephalus, severe vascular disease or mass lesions were eliminated from this study. In our 100 normals, the normal ASP was within 8 mm above and below the CPL, and in the majority (82%) it was located behind the midpoint of the CPL. It was not situated more than 14.4 mm posterior and never more than 3.1 mm anterior to the midpoint. Application of these normal relationships facilitates detection of small, deep retrosylvian masses occupying the medial portions of the parietal, occipital and temporal lobes.

Key words: Angiographic sylvian point – Sylvian triangle – Retrosylvian mass – Clinoparietal line

The sylvian triangle [1] is one of the most useful landmarks on lateral cerebral angiograms. The posterior apex of the triangle is referred to as the angiographic sylvian point (ASP) [2] and its forward displacement is one of the cardinal findings with retrosylvian masses [3].

The clinoparietal line [4] is also one of the most useful landmarks on the lateral cerebral angiogram for determining the position of the middle cerebral artery and detecting mass lesions in and around the sylvian triangle. However, normal relationships of the ASP and CPL, while both of them are closely related to the middle cerebral artery, have not been defined on lateral cerebral angiograms to the best of our knowledge.

A study of the normal position of the ASP in relation to the CPL on 100 normal lateral angiograms was made in order to better detect minor displacements of the ASP because with small deep retrosylvian lesions the shift is frequently minimal and not readily apparent on angiograms.

Material

One hundred consecutive normal carotid angiograms were used to study the normal relationships of the ASP to the CPL on the lateral films. Clinical picture of these patients included transient ischemic attacks, headaches or seizure disorders. Any patients with severe neurological deficits or angiographic evidence of hydrocephalus, severe vascular disease or mass lesions were eliminated from this study. The age of patients ranged from 22 to 65 years. Corrections were made for magnification, if any.

The ASP is the point where the last main branch, usually the angular branch, of the middle cerebral artery leaves the posterior end of the insula to reach the surface of the brain [5]. The ASP was usually readily identified on the lateral angiograms as the arterial loop at the posterior apex of the sylvian triangle which frequently recurves anteriorly as it leaves the sylvian fissure in contrast to other arterial branches leaving the fissure more anteriorly.

The frontal film was very rarely necessary for identifying the artery which represented the ASP on the lateral film. The CPL was drawn from a point (P) on the inner table of the skull 9 cm above the internal occipital protuberance anteriorly to the tuber-
The Normal Angiographic Sylvian Point on the Lateral Cerebral Angiogram

The normal angiographic sylvian point (ASP) is a well-defined and important landmark for detecting mass lesions in and around the sylvian fissure. It was suggested that the ASP may be a halfway point on the CPL [6, 7] but their exact relationships have not been defined. In our 100 normal lateral carotid angiograms, the ASP was located behind the midpoint (M) of the CPL in the majority (82%) and was never situated more than 3.1 mm anterior or 14.4 mm posterior to the midpoint (M) of the CPL. Also, the ASP was within 8.0 mm below the CPL in 54%, on the line in 16% and within 8.1 mm above the line in 30%. Therefore, the normal ASP was always within 8 mm above or below the CPL in 100 normals.

These relationships of the ASP to the CPL can be applied to detect various subtle but definite displacements with retrosylvian masses. With deep medial retrosylvian masses occupying medial portions of the parietal, occipital and temporal lobes, the angiographic findings such as stretching, displacement, or separation of vessels may be inconspicuous notwith-