anatomy lab #6

Picture#1



The doctor pointed at many structures in this section (thalamus , hypothalamus , fornix, corpus callosum parts , parieto-occipital sulcus, calcarinesulcus, cigulategyrus) he said that he can bring many questions from it about the blood supply , also about medial medullary syndrome, lateral medullary syndrome.

There is two types of alexia the first one is pure alexia due to a lesion in the left cortex And splenium of corpus callosum, the second one is alexia with agraphia due to lesion on the left angular gyrus.

Picture #2



Angle horizontal section : in this section we can see the body of the lateral ventricle, but there is no thalamus no lentiform, we can see part of the corpusus callosum, as there is no thalamus and lentiform we will not see internal capsule only corona radiata.

Picture #3



It is an angled horizontal section (I will describe it from the left to the right horizontally) this section start from the lower areas of the brain , in the first we can see the medulla and part of the cerebellum, then the Pons will appear with its characteristic lobular shape , and between the cerebellum and Pons we will see the fourth ventricle , then the cerebellum start to decrease in size. on the other hand, cerebrum will start to appear , the cerebellum will continue in decreasing until it completely disappears , then more superiorly we will see the midbrain around it the cerebrum and no cerebellum , more superiorly the thalamus will appear instead of the midbrain and it will be ill-defined in the beginning , then we will reach the typical picture (the second column, picture number 4 from the top) which has (anterior horn , posterior horn , genu , splenium) but the lentiform

here isn't clear, then more superiorly we will see the body of lateral ventricle, then more a

nd more superiorly no lateral ventricle, no thalamus , what we will see is only the white matter and the cortex ,eventually we will end with the cortex only .

Picture # 4



This section is similar to the previous one with the same notes exactly

picture#5



Let us divide this picture into three columns , the first column is angle horizontal section, T1 weighted, (the notes below will describe the pictures from the upper to the lo wer vertically in this column).

In the first we can see the medulla and cerebellum with a small part of the temporal lobe, then the Pons appears and the cerebellum start to decrease in size and the cerebrum gets larger, so we can see parts of the frontal, temporal and occipital lobes, then the midbrain appears, above it is the thalamus, until we reach the last picture which is the typical one contains(Anterior horn, posterior horn, genu, splenium and two thalami)

the second column represent T2 weighted, and the third column represent coronal sections.

Note : prosopagnosia "face blindness" is condition in which the patient is unable to recognize familial faces and it results from lesions involving the inferior part of the temp oral lobe

Picture #6 :



This picture represents an extensive infarction, which is very obvious in the last picture, this infarction covers a large area of the left cerebral hemisphere and the cortex, it can be as a result of closure of the middle cerebral artery by thrombus or embolus or due to an ischemia, the embolus can be from atrial fibrillation or from the internal carotid artery.

If the patient come to you in the early stages complain from mild aphasia and we find that there is an thrombus or stenosis, he must be treated to prevent the conversion to global aphasia which means (loss of motor speech area and sensory speech area, also there must be paralysis due to loss of motor area).