

MEDICAL NEUROSCIENCE
NOP-ANTR-PSL-RAD 552

Forebrain Laboratory
Objectives 2005

Final Version

1a.

olfactory bulb



1a. olfactory bulb

1b. olfactory tract



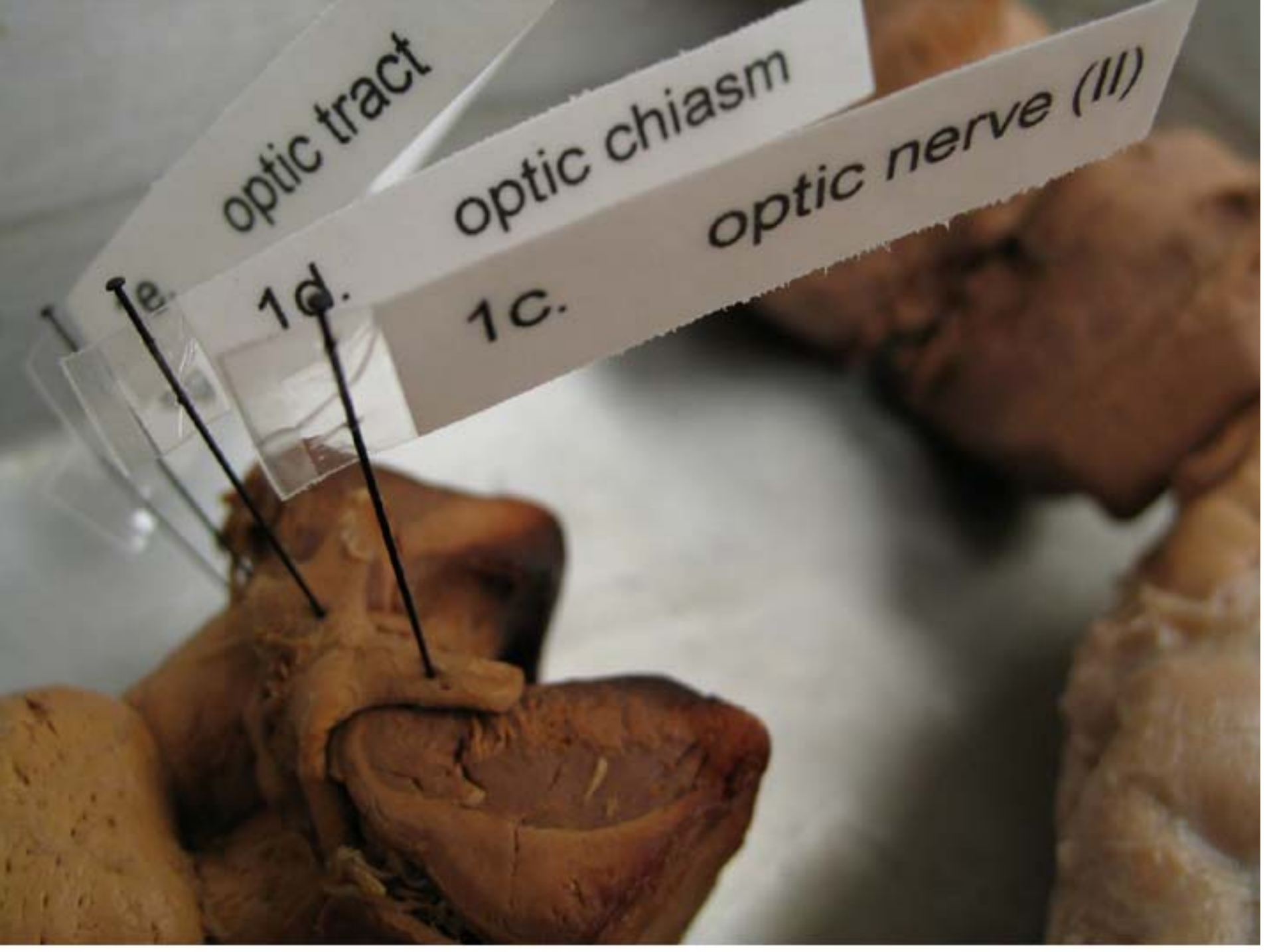
optic tract

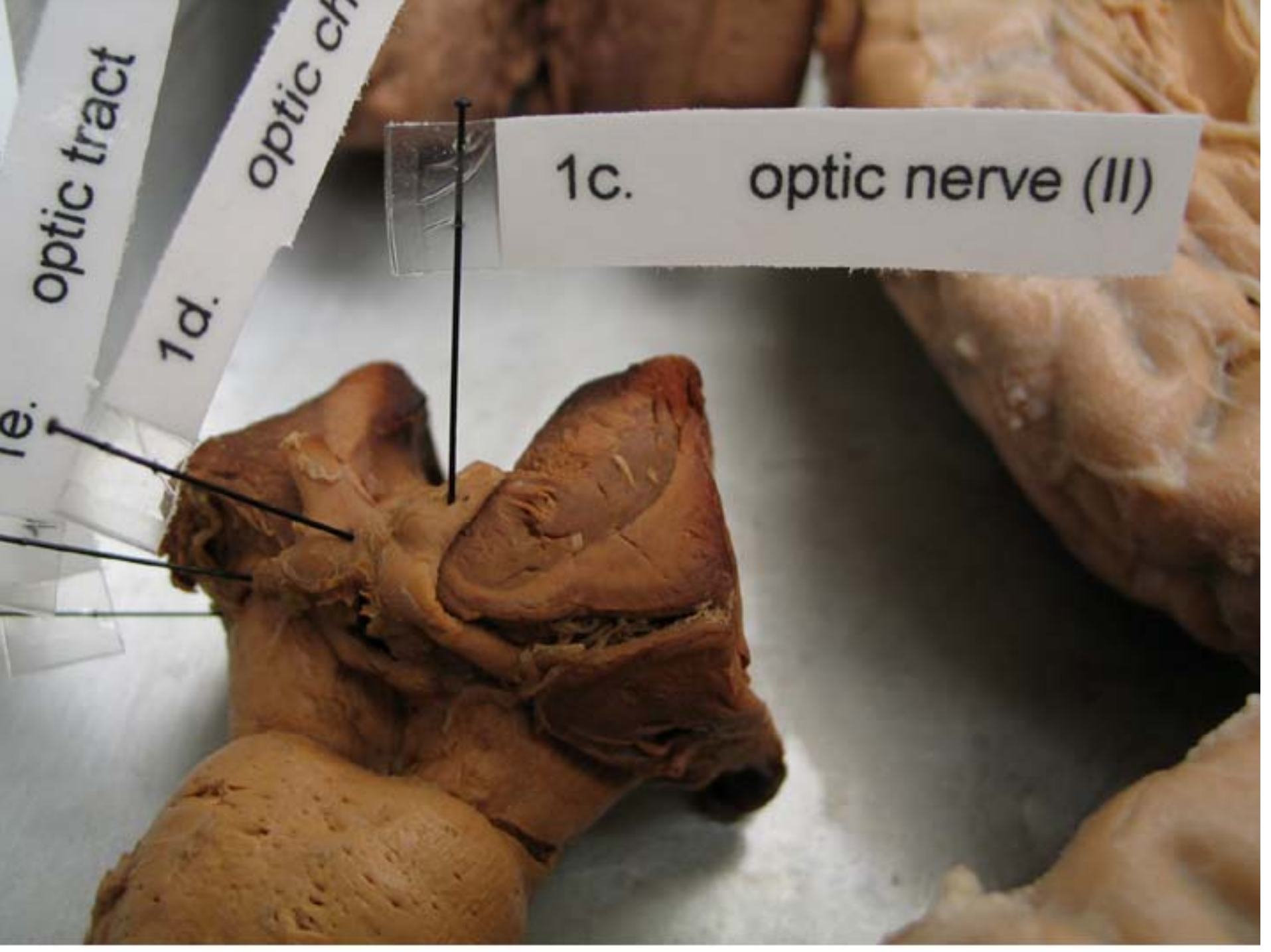
optic chiasm

optic nerve (II)

1d.

1c.





1c.

optic nerve (II)

1d.

optic chiasm

le. optic tract



1d.

optic chiasm

-pit nerve

lateral geniculate

1e. optic tract

1d.

optic chiasm

optic nerve



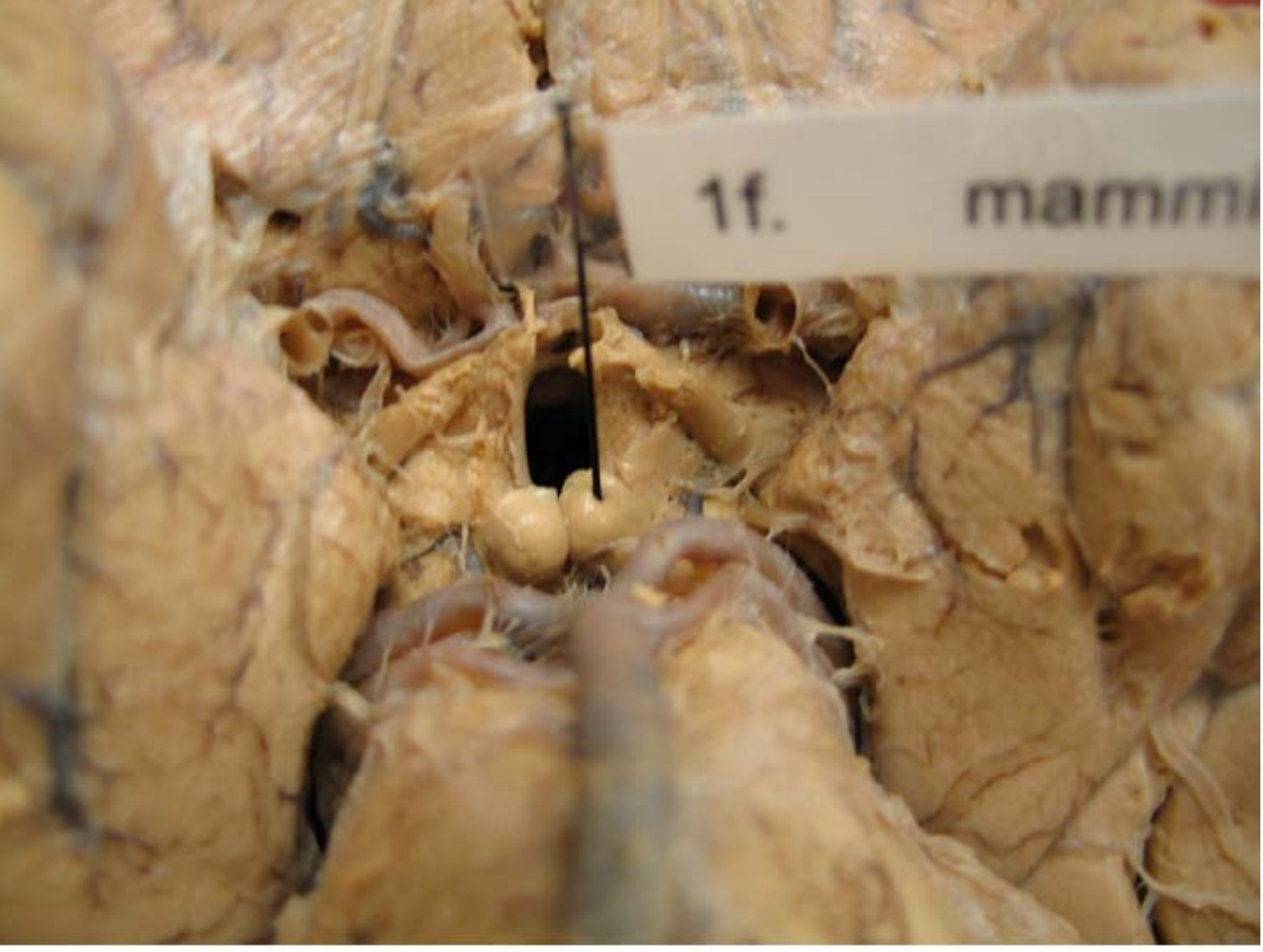
A close-up photograph of a dissected anatomical specimen, likely a mammary gland. The tissue is light tan and shows various structures including ducts and lobules. A small, dark, circular opening is visible on the left side. A white paper label is attached to the specimen with a black thread. The label has the text "1f. mammary bodies" printed on it. The background is a solid reddish-brown color.

1f.

mammary bodies

1f.

mamm







1h. medial geniculate body

1h1. **brachium of inferior colliculus**



1h.

medial gen

1h1.

brachium of i

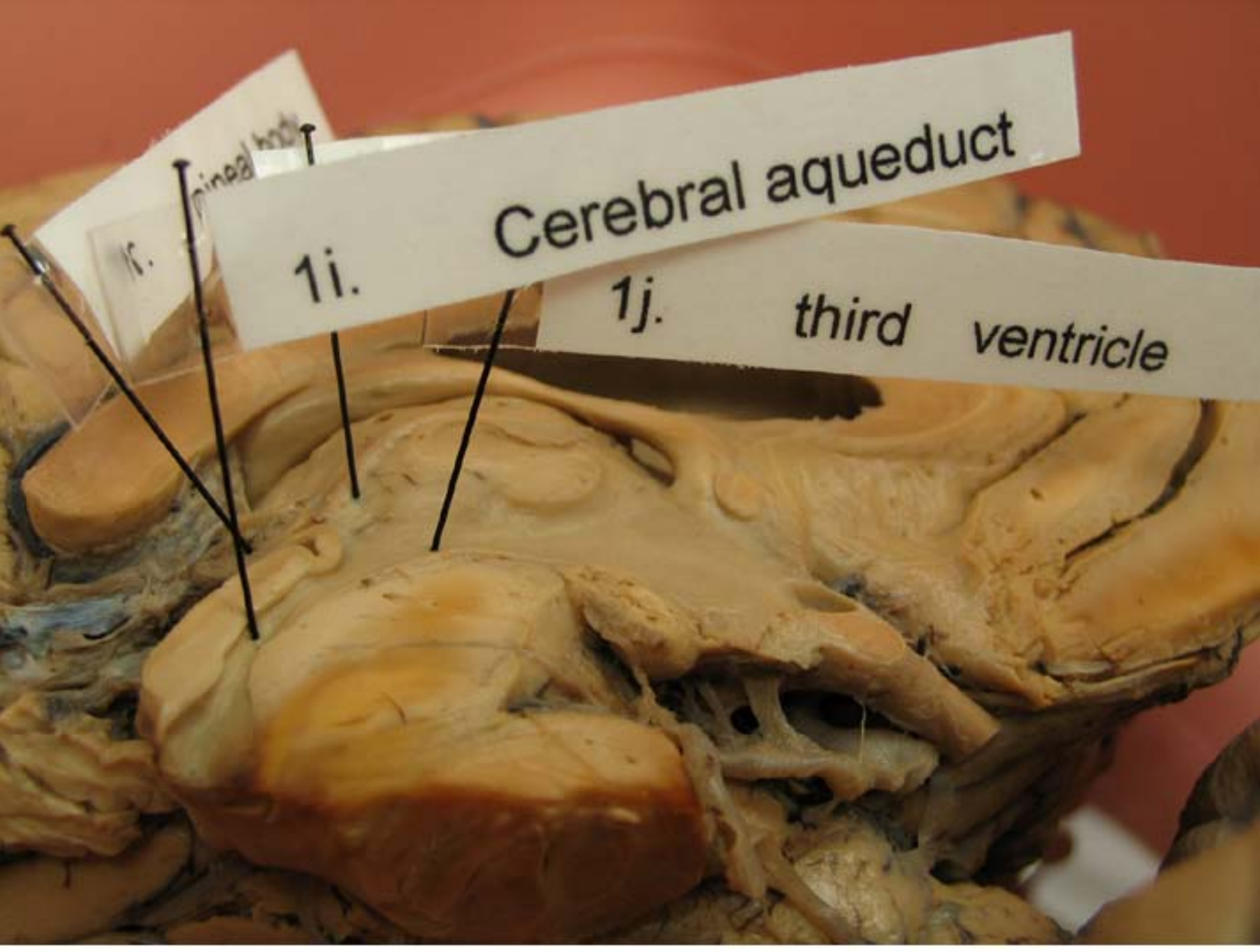


Cerebral aqueduct

1i.

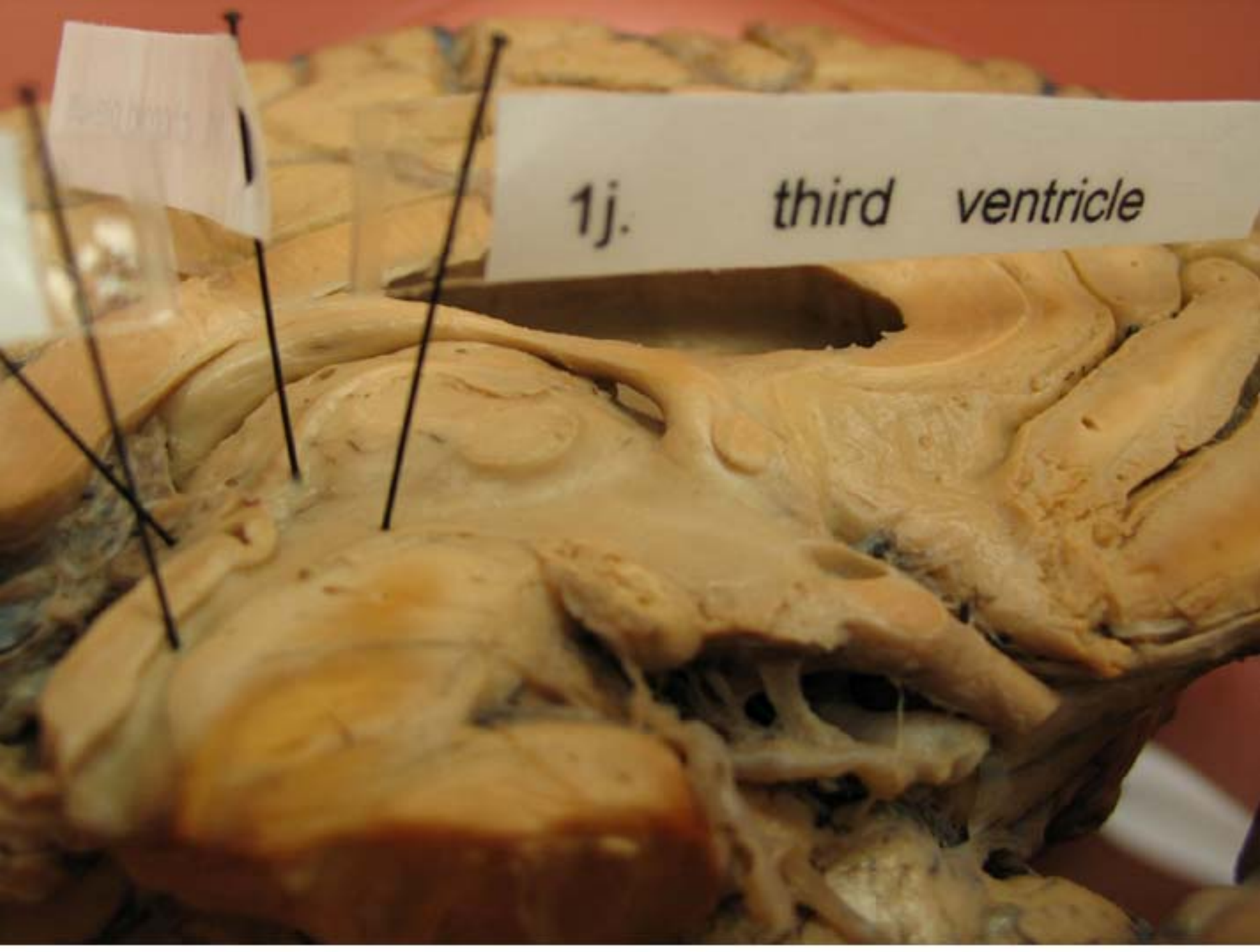
1j.

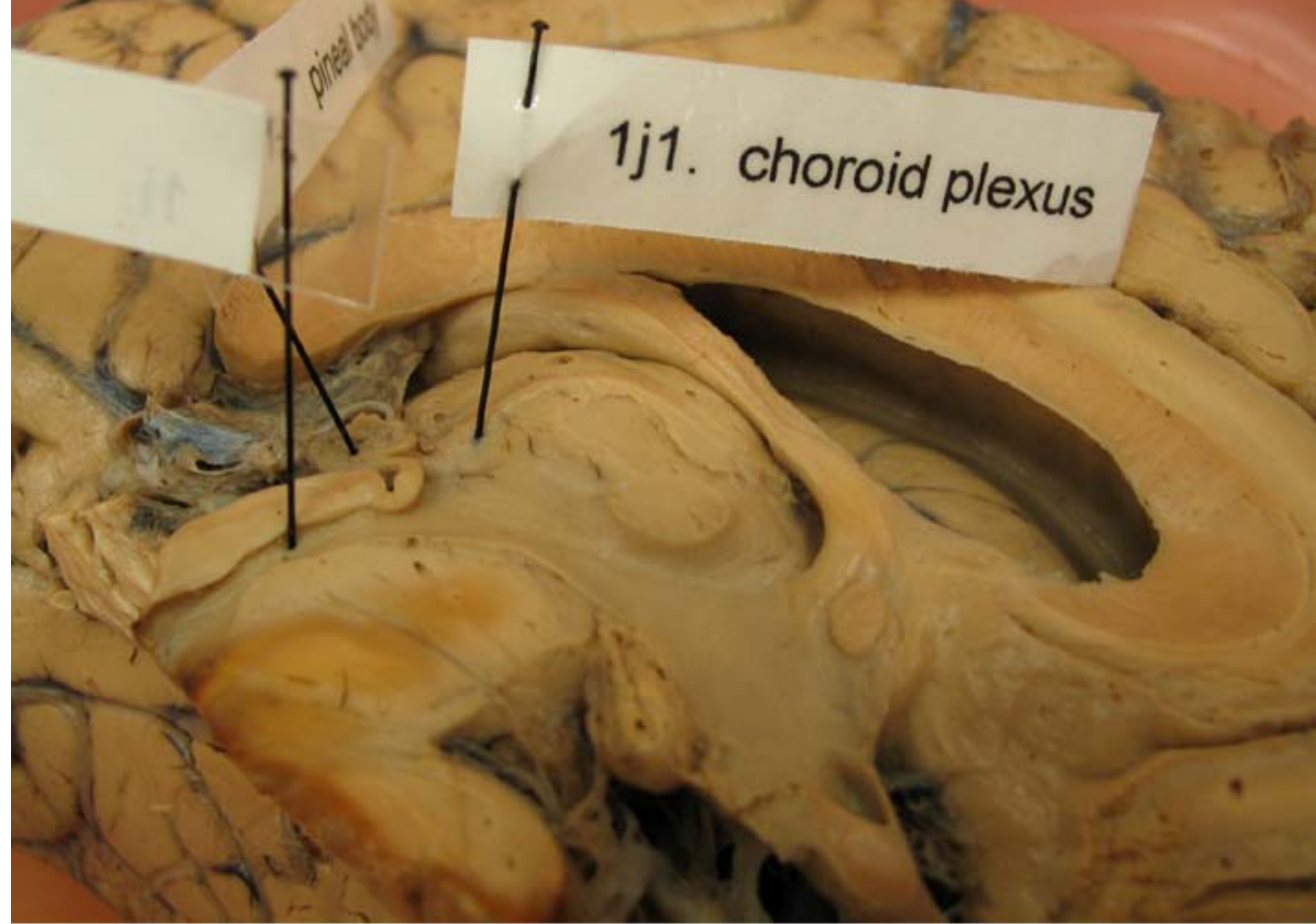
third ventricle



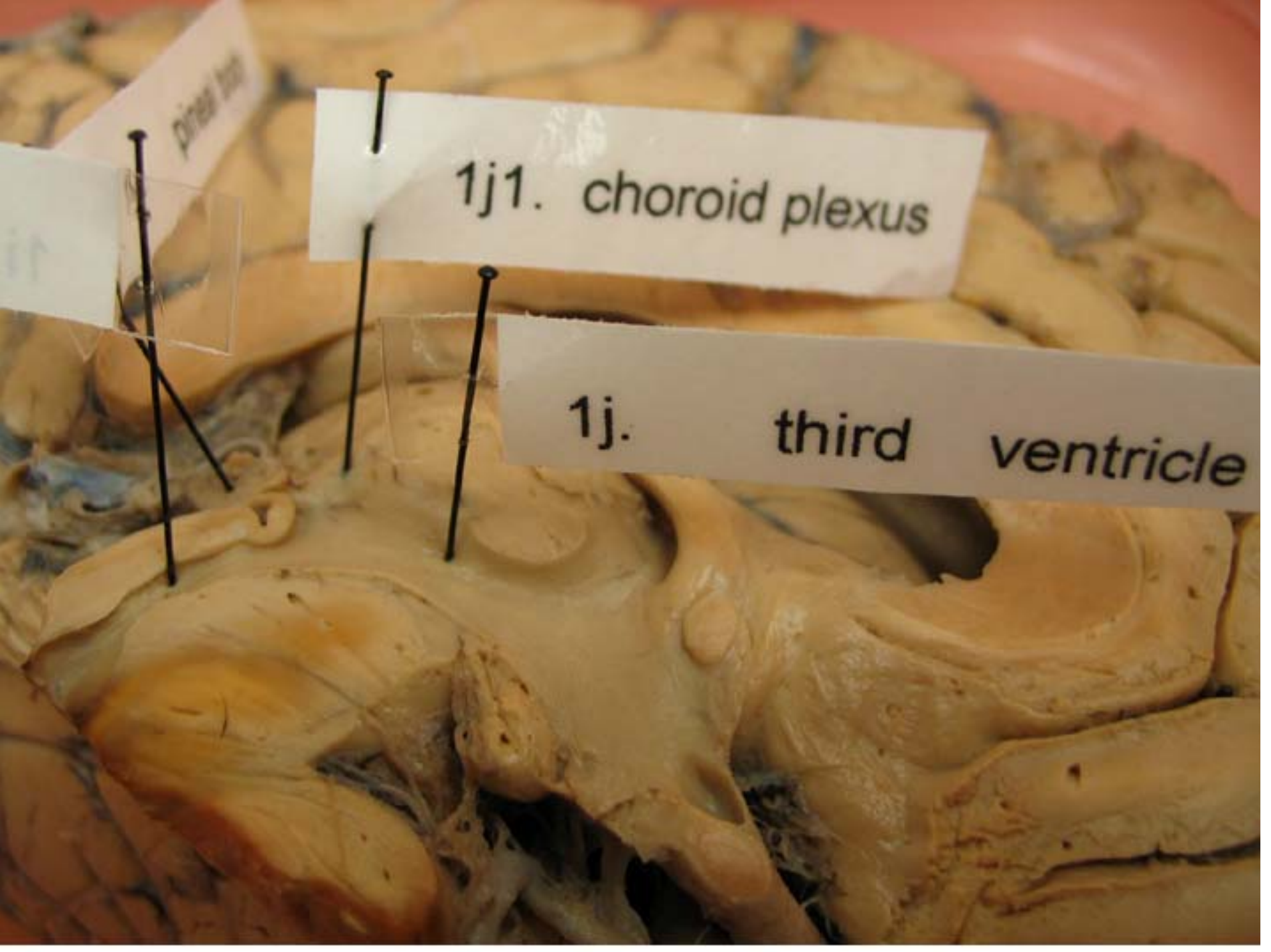
1j.

third ventricle





The choroid plexus in the 3d ventricle lies on the posterior portion of the roof of the ventricle.



A close-up photograph of a dissected anatomical specimen, likely a section of the brain or a related structure, showing various internal features. The tissue is light-colored and has a complex, folded appearance. Several black pins are used to hold open the dissection. Two white labels with black text are placed over the specimen. The label '1j1. choroid plexus' is positioned above the label '1j. third ventricle'. A third, partially visible label on the left reads 'pineal body'.

1j1. choroid plexus

1j. third ventricle



The lamina terminalis extends between the anterior commissure and the optic chiasm.



11.

anterior commissure

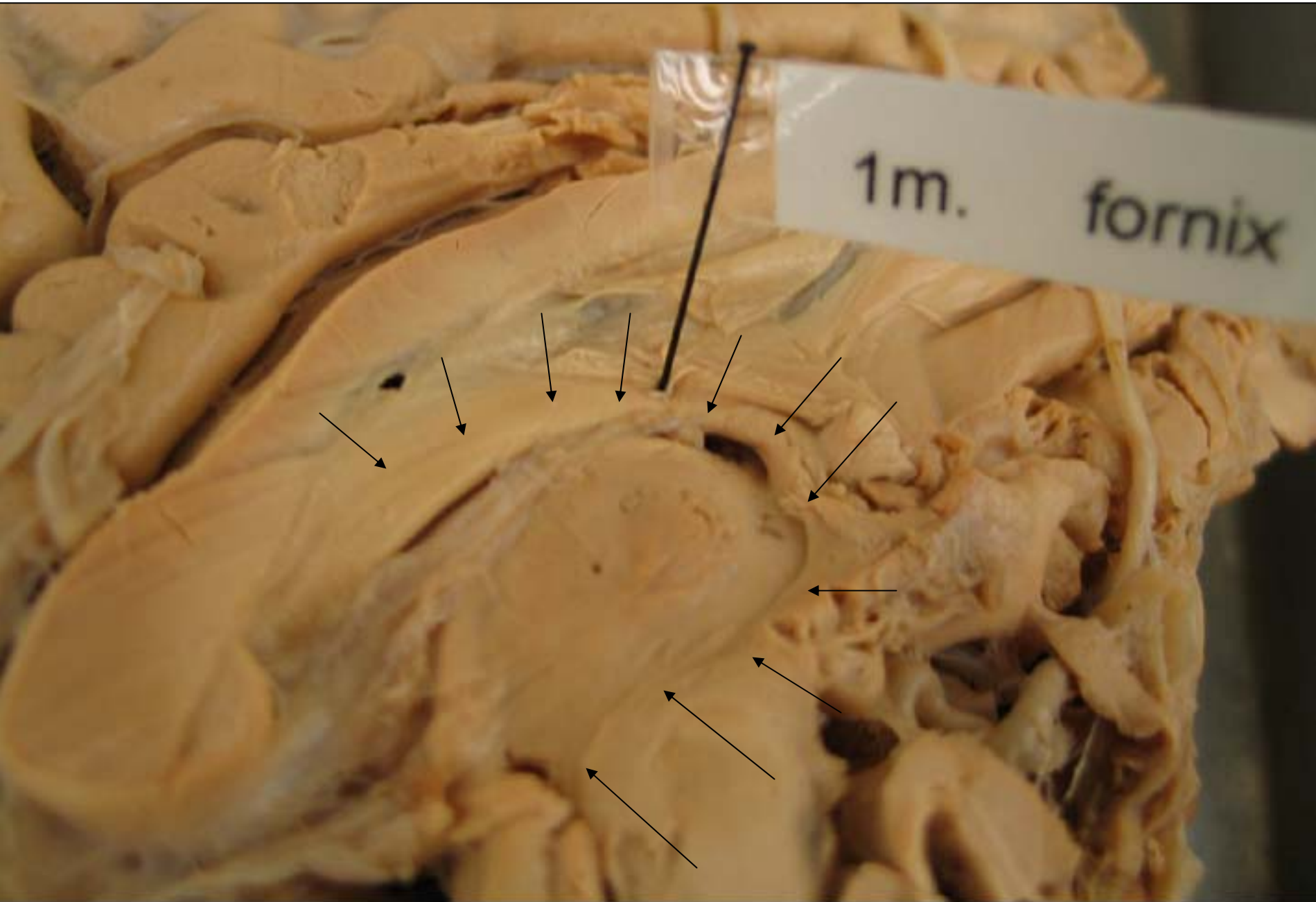




11.

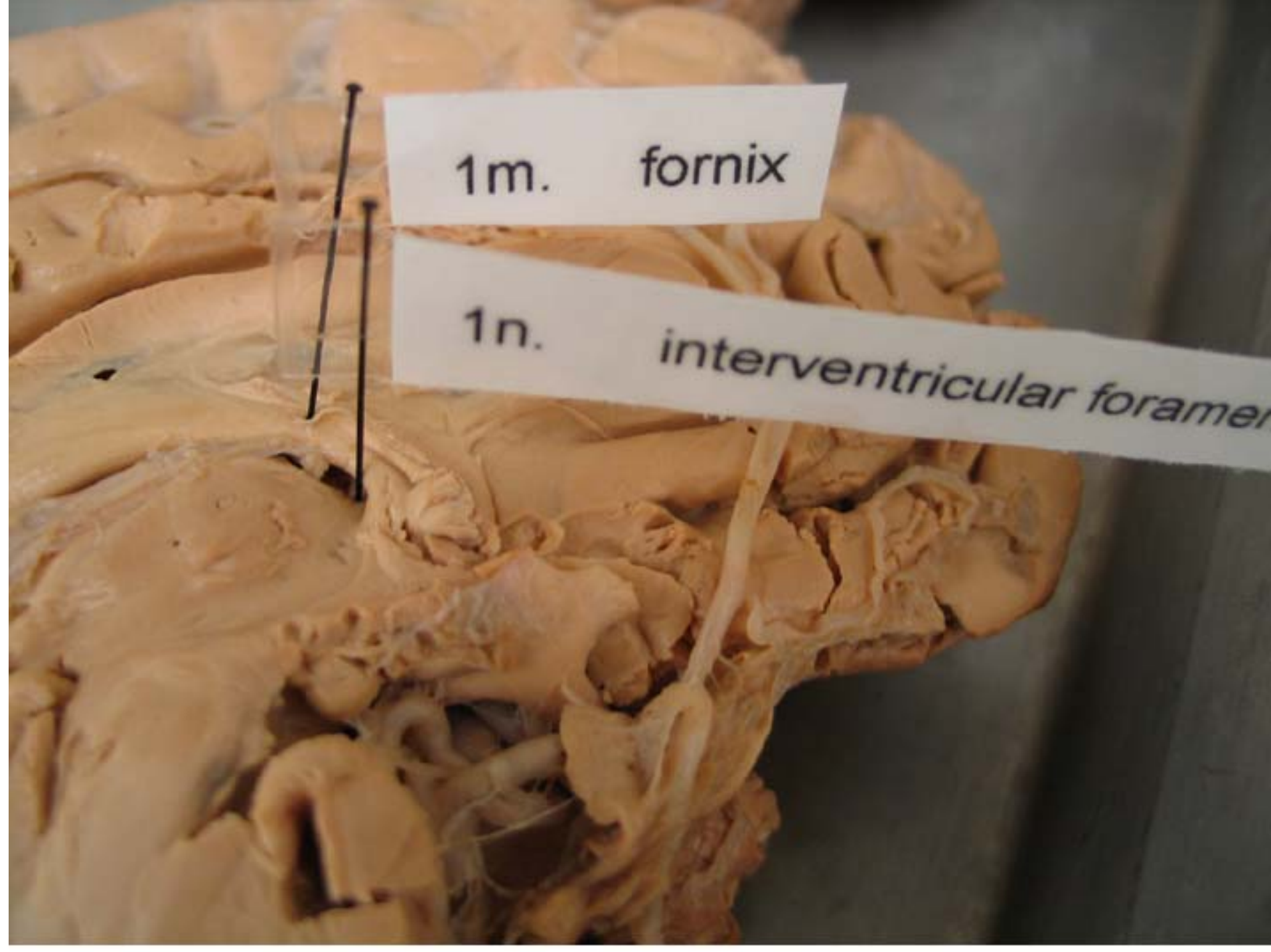
anterior c

The fornix is a bundle of fibers which contains axons coming from the hippocampus, to the hippocampal commissure, behind the anterior commissure, through the hypothalamus, to the mammillary bodies.





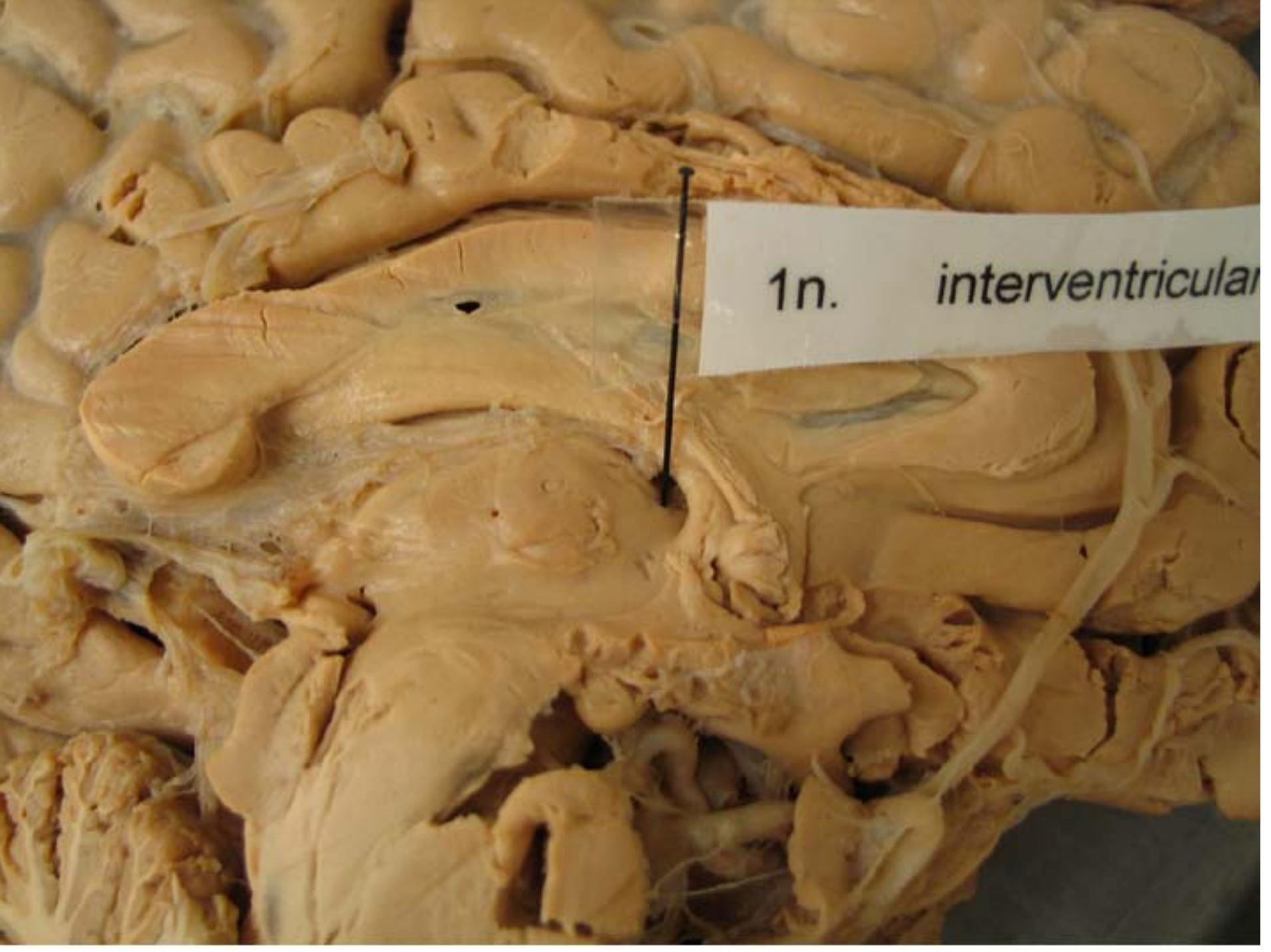
1m. fornix



1m. fornix

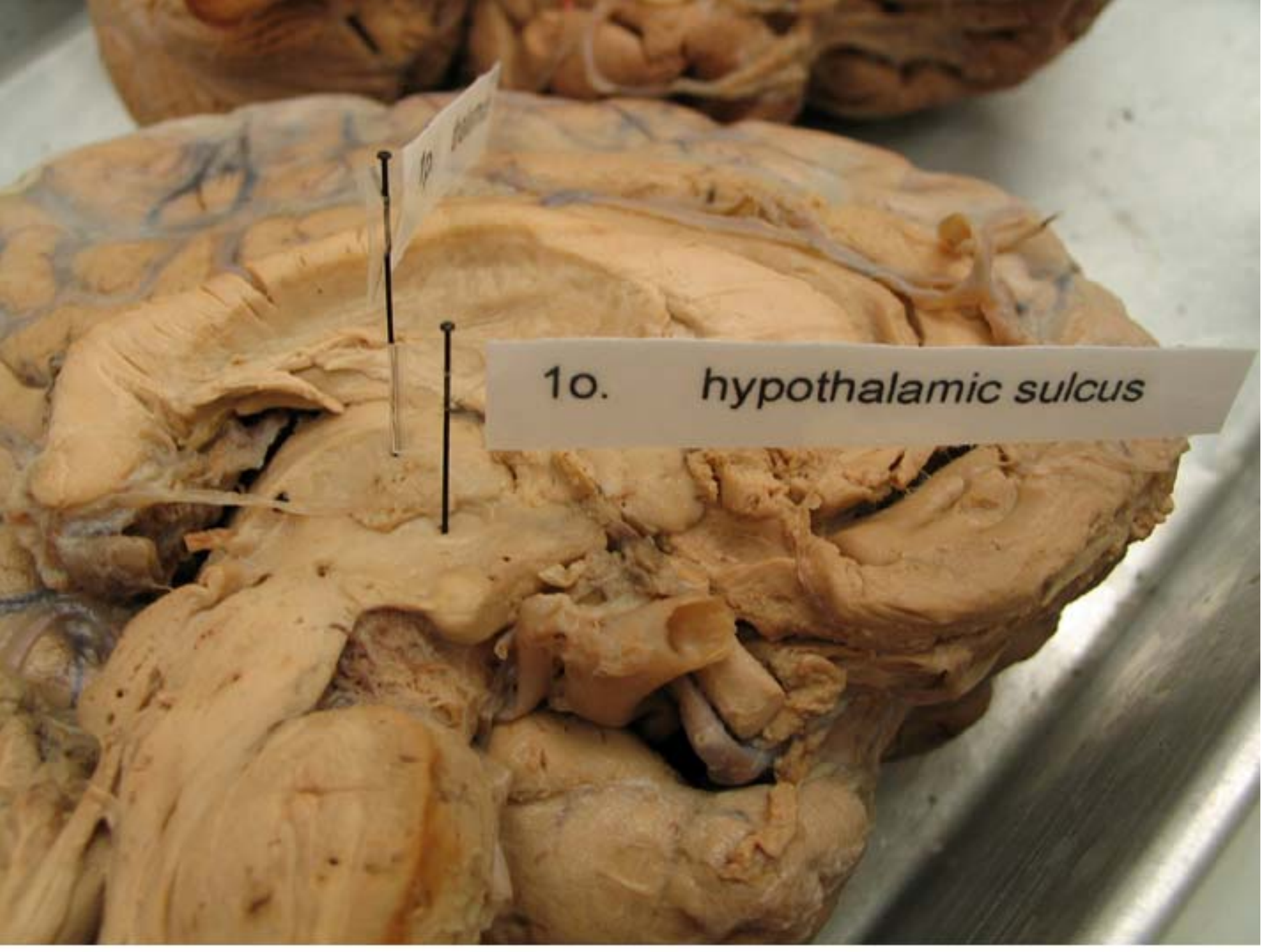
This image shows a detailed anatomical dissection of the brain, specifically the region of the fornix and the interventricular foramen. The tissue is a light tan color, and the dissection reveals the underlying structures. Two black pins are used to hold open the dissection. A white label with black text is placed over the dissection, pointing to the fornix. Another white label with black text is placed below it, pointing to the interventricular foramen. The background is a dark, textured surface.

1n. interventricular foramen



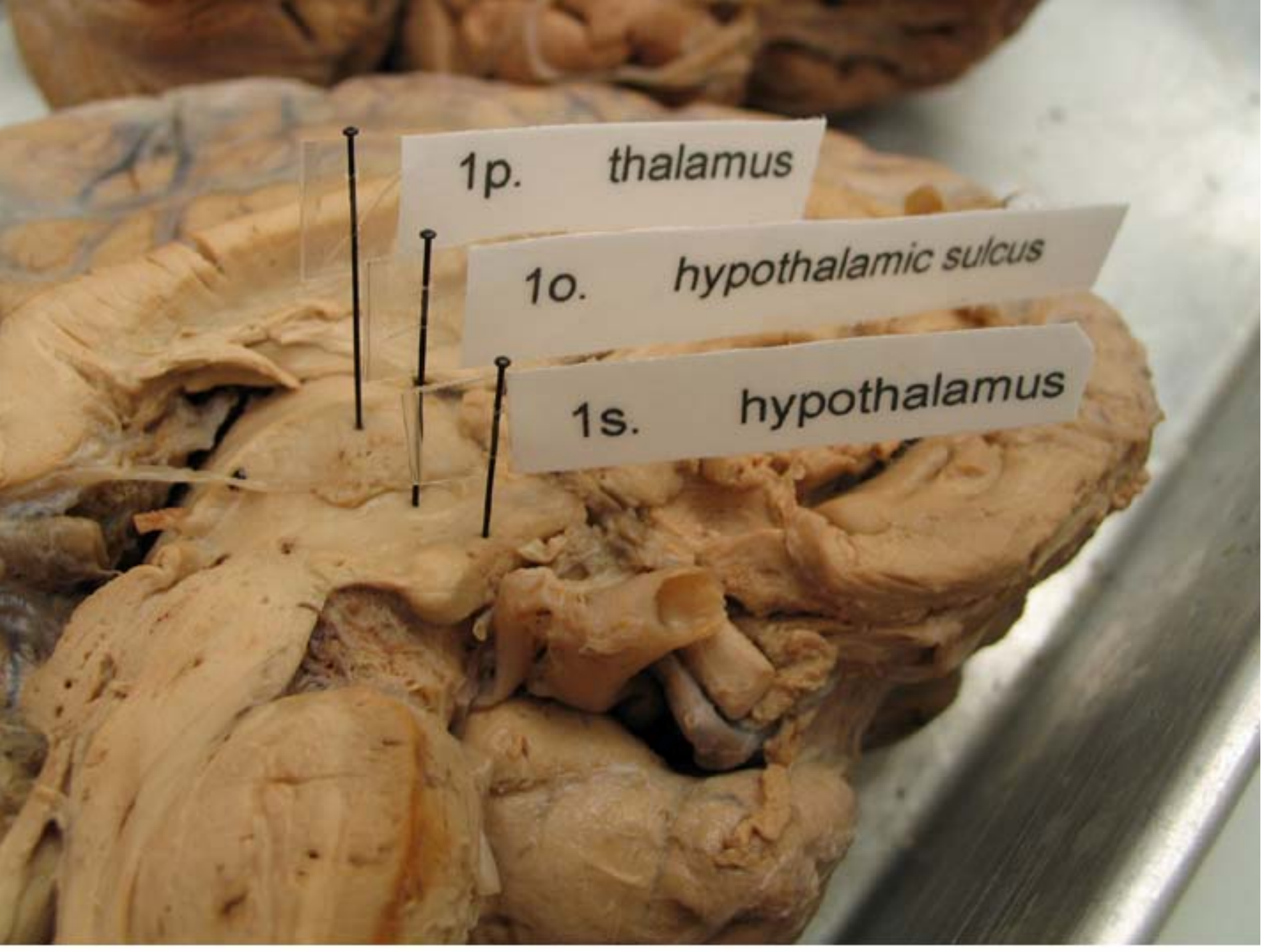
1n. interventricular

This image shows a detailed anatomical dissection of the heart, specifically the interventricular septum. The septum is a muscular wall that separates the left and right ventricles. It is shown in a cross-section, revealing its internal structure and the surrounding myocardium. A black line points from the label '1n. interventricular' to the septum. The tissue is a light tan color and has a fibrous, layered appearance.



10. *hypothalamic sulcus*

This image shows a detailed anatomical dissection of the hypothalamus. The tissue is a light tan color and has a complex, folded appearance. A white label with black text, '10. hypothalamic sulcus', is placed over the dissection. Two black pins are used to hold the tissue open, revealing the sulcus. The background is a plain, light-colored surface.



1p. thalamus

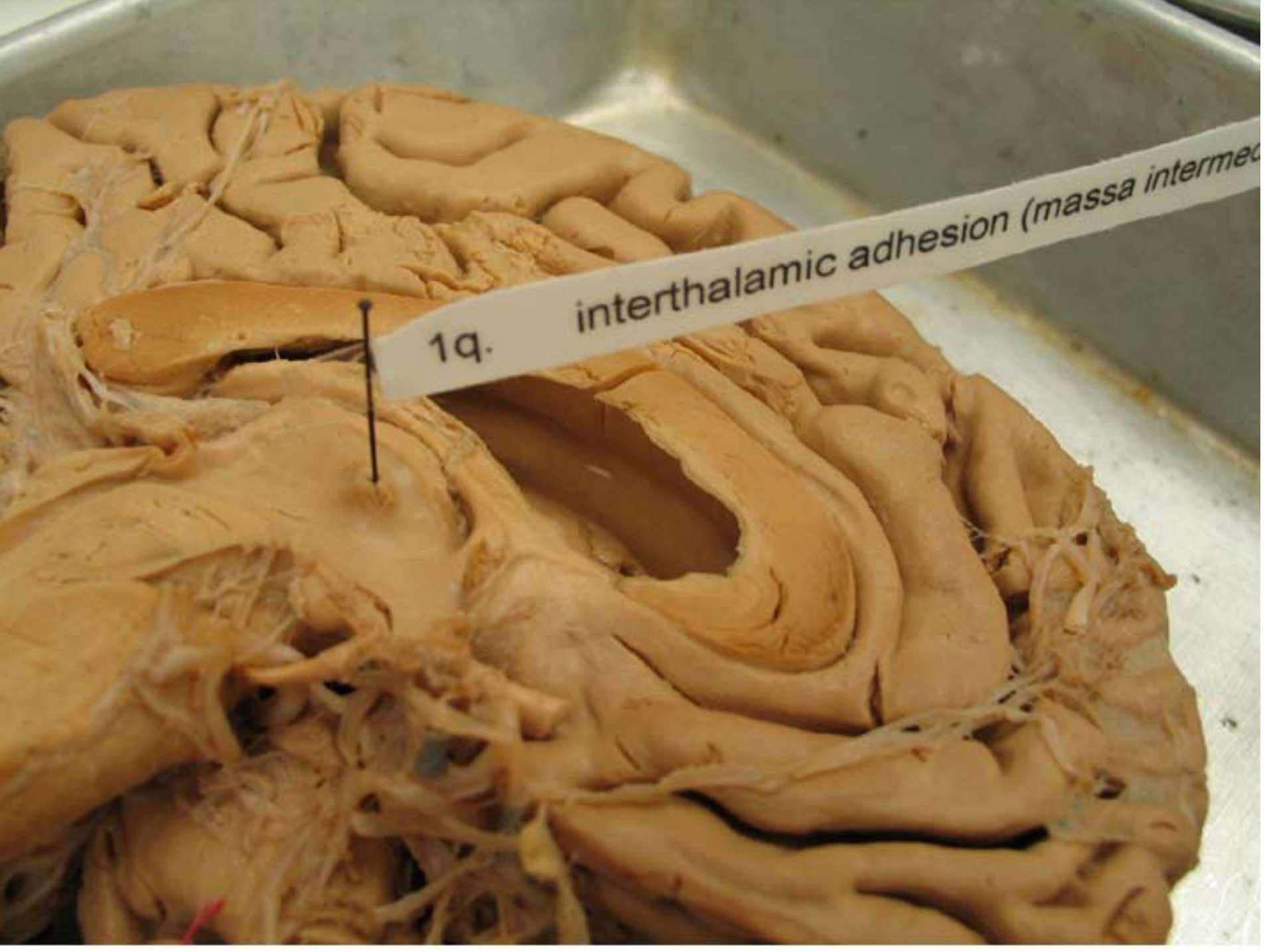
This image shows a detailed anatomical dissection of the base of a human brain. Three labels are pinned to the tissue with black pins. The top label points to the thalamus, the middle label points to the hypothalamic sulcus, and the bottom label points to the hypothalamus. The tissue is light brown and shows various anatomical structures, including the optic chiasm and the pituitary gland.

1o. *hypothalamic sulcus*

1s. hypothalamus

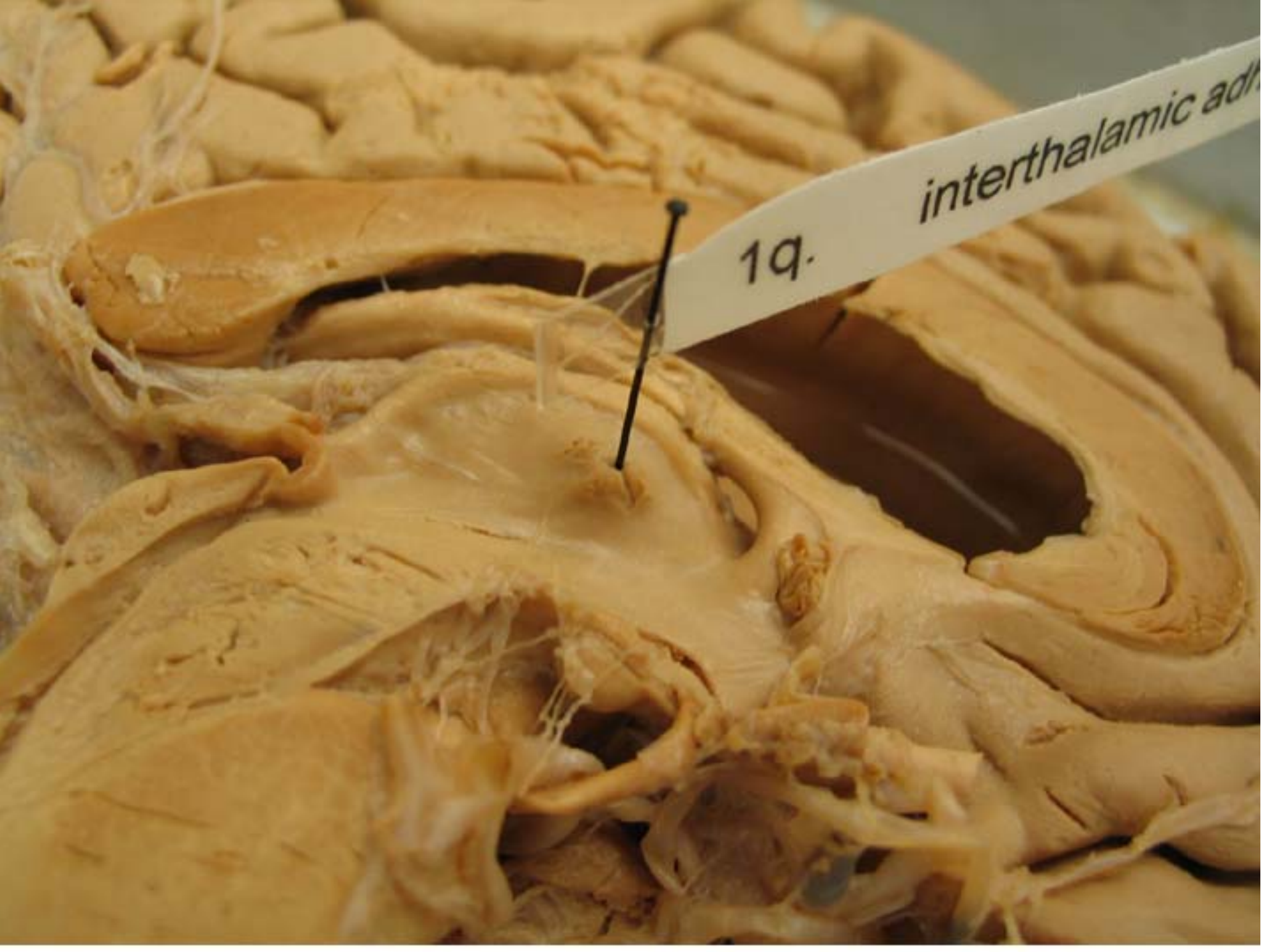


1p. thalamus



1q.

interthalamic adhesion (massa intermedia)



19.

interthalamic adh



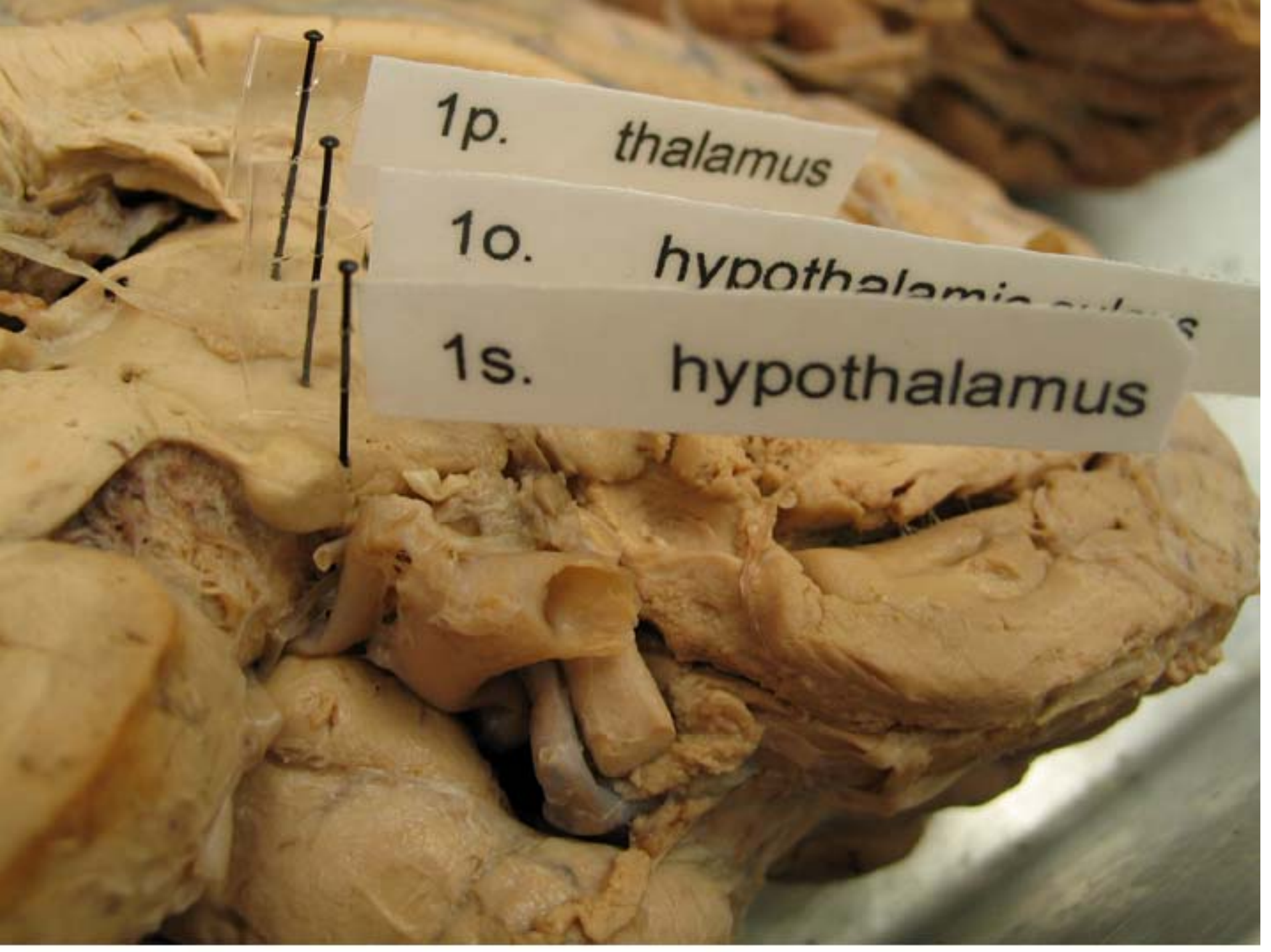
1r. pineal body

This image shows a detailed anatomical dissection of the pineal body, a small, pea-sized gland located in the brain. The pineal body is situated between the two halves of the thalamus and is surrounded by the third ventricle. The dissection reveals the intricate network of blood vessels and neural structures associated with this gland. A small, white, rectangular label with the text "1r. pineal body" is placed over the dissection, with a thin black line pointing to the specific structure. The background is a solid orange color, providing a clear contrast to the anatomical structures.

1r.

pineal body



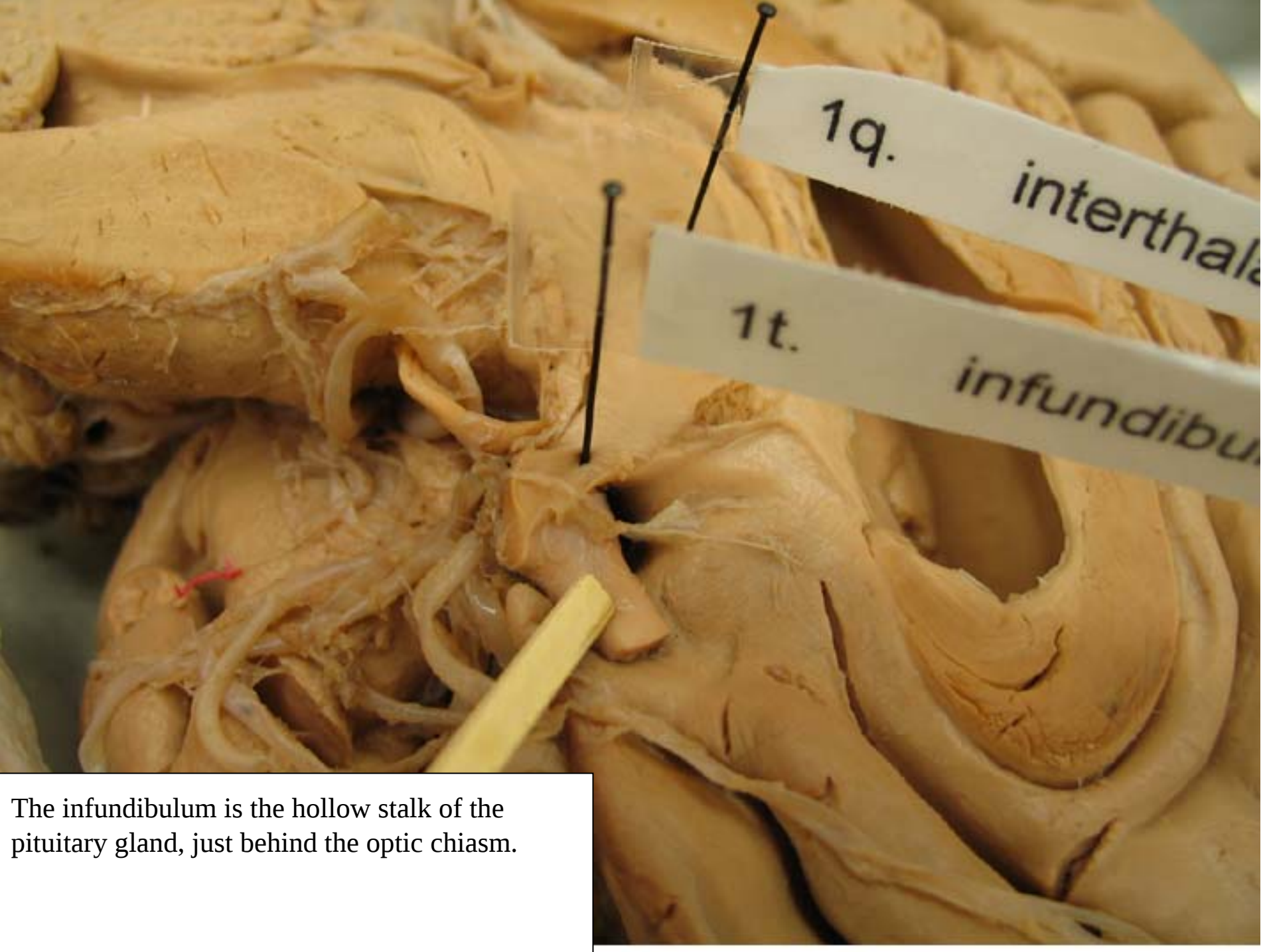


1p. *thalamus*

This image shows a detailed anatomical dissection of the base of a human brain. Three white labels with black text are pinned to the tissue with black pins. The labels identify the thalamus (1p.), the hypothalamic sulcus (1o.), and the hypothalamus (1s.). The tissue is light tan and shows various anatomical structures, including what appears to be the optic chiasm and surrounding vessels and nerves.

1o. *hypothalamic sulcus*

1s. *hypothalamus*



The infundibulum is the hollow stalk of the pituitary gland, just behind the optic chiasm.



1t.

infundibulum

The stria medullaris is a white bundle of myelinated fibers seen on the wall of the third ventricle above the massa intermedia

1u.

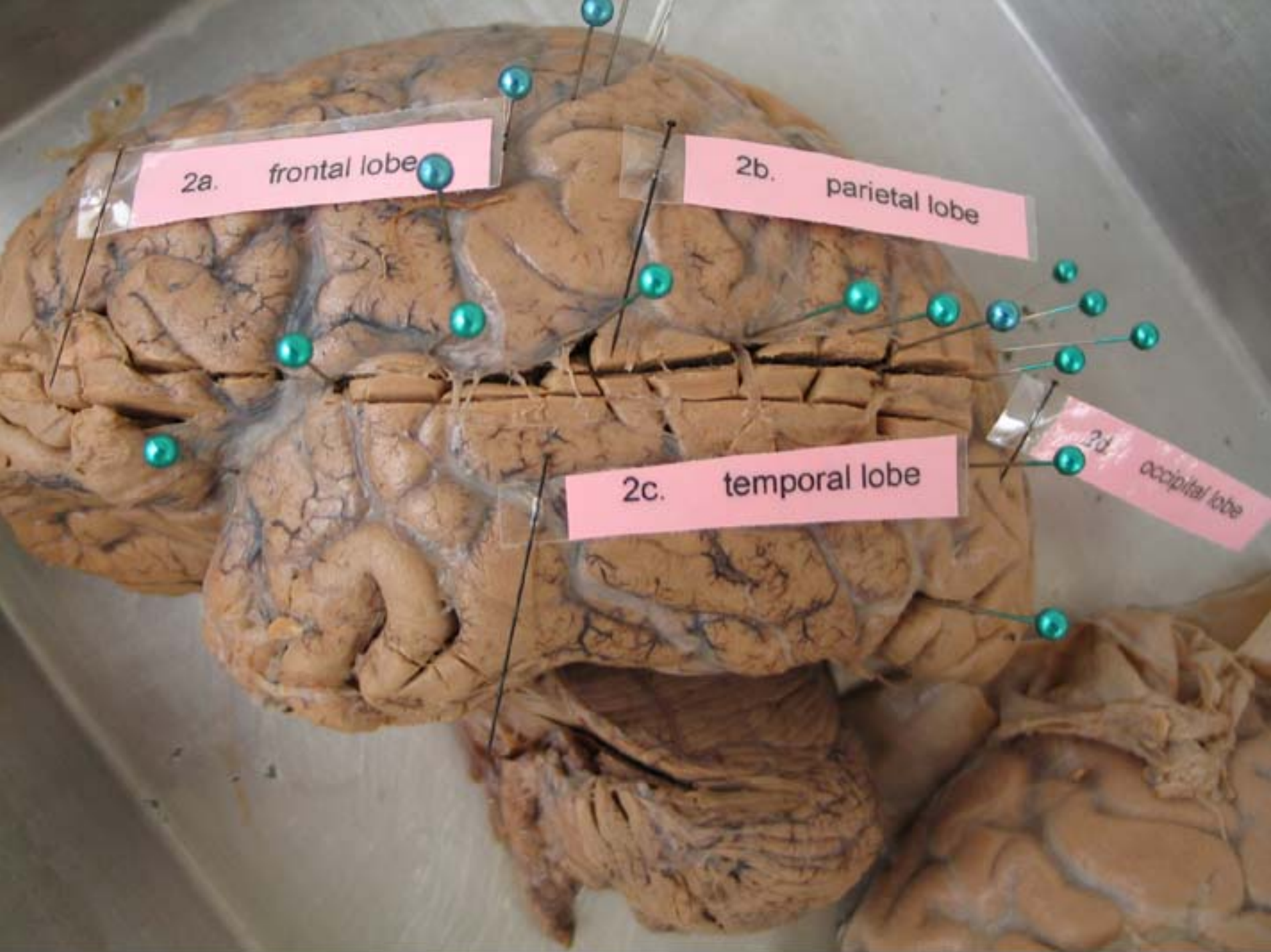
stria medullaris thalami



1u.

stria medulla



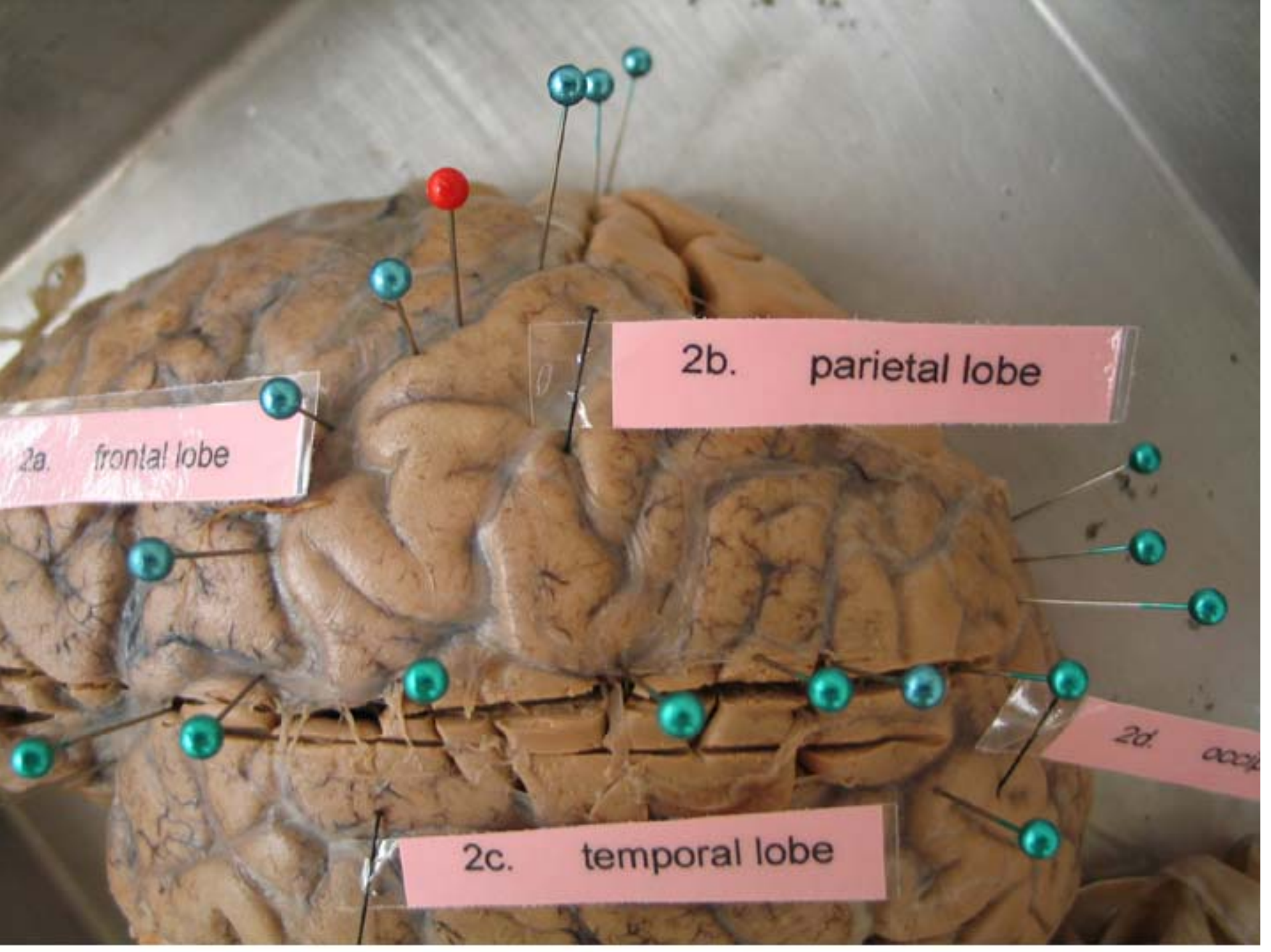


An anatomical model of a human brain, likely a left hemisphere, is shown. The brain is brown and has a highly convoluted surface with numerous gyri and sulci. It is mounted on a light-colored surface. Several pins with colored heads (blue, red, green) are inserted into the brain tissue. Three pink labels with black text are attached to the brain with clear tape. The label '2a. frontal lobe' is positioned over the anterior part of the brain. The label '2b. pa' is partially visible on the right side. The label '2c. temporal' is at the bottom right. The brain is oriented with the frontal lobe at the top and the temporal lobe at the bottom.

2a. frontal lobe

2b. pa

2c. temporal



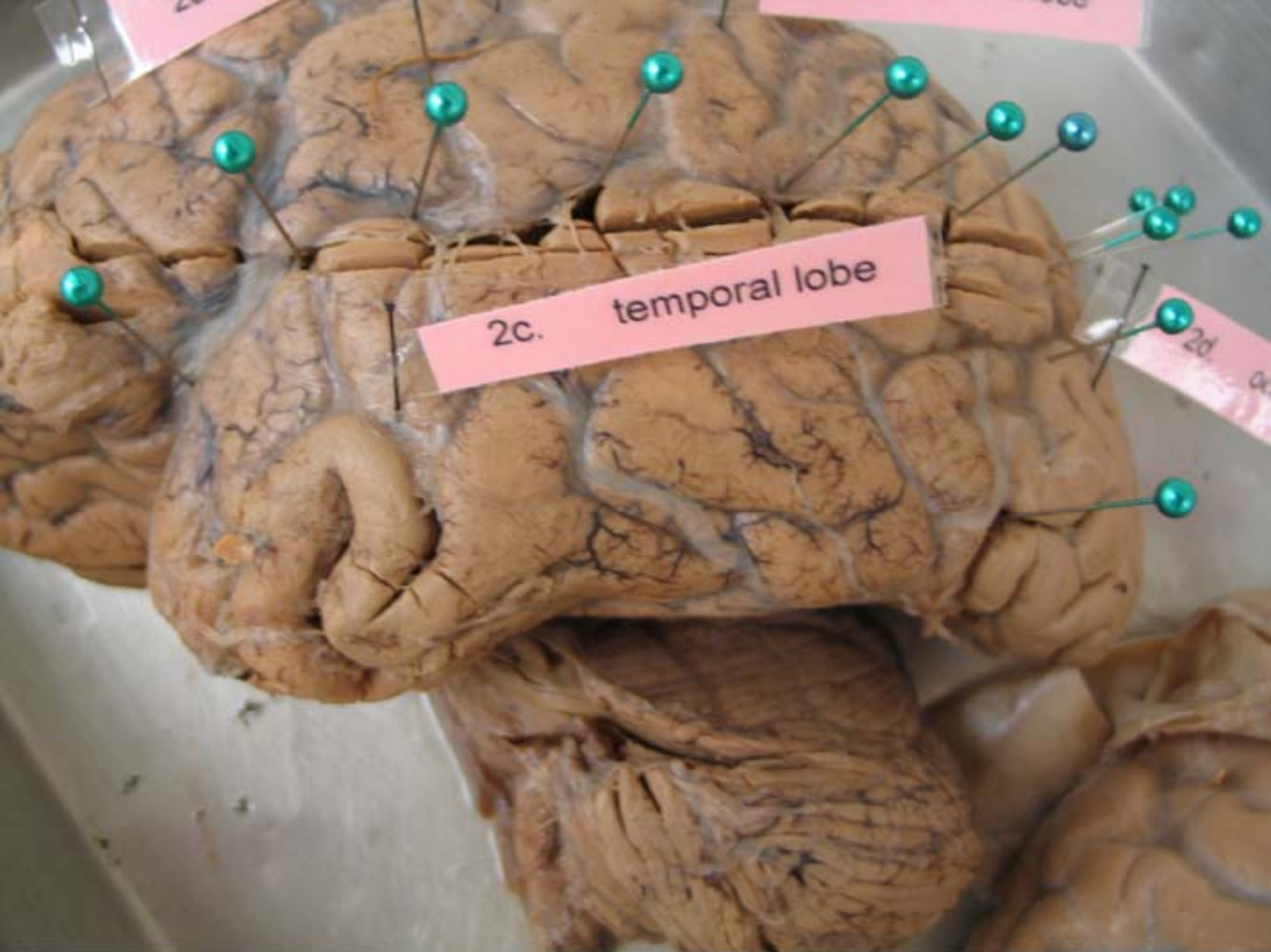
2a. frontal lobe

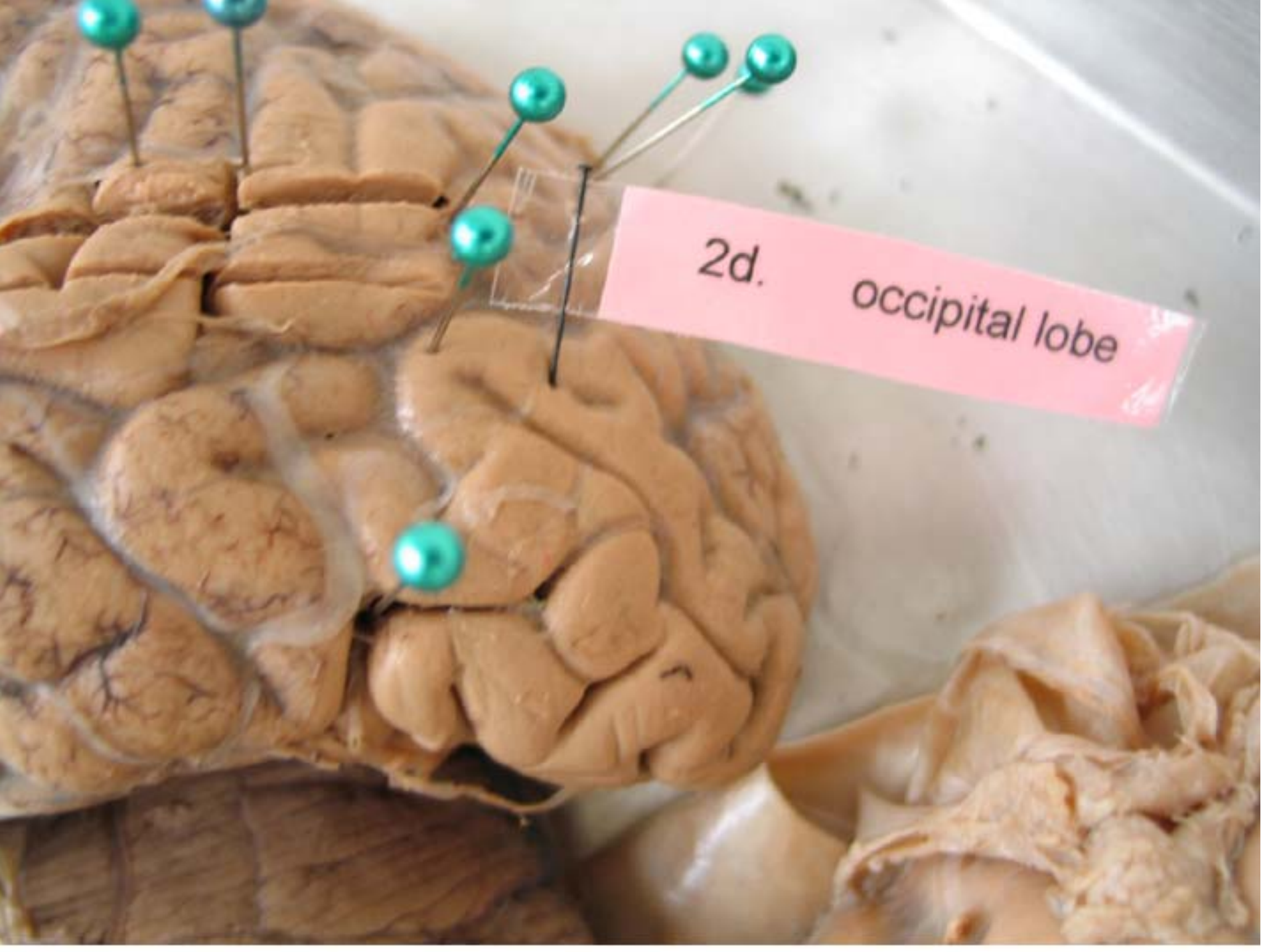
This image shows a detailed anatomical model of a human brain, likely made of a light brown, textured material like clay or plaster. The brain is positioned on a light-colored surface. Several colored pins are used to mark specific areas: a red pin is located on the upper part of the frontal lobe, and several teal pins are placed along the lateral and posterior margins. Three pink labels with black text are attached to the model with thin black lines. Label '2a. frontal lobe' points to the anterior region. Label '2b. parietal lobe' points to the superior lateral region. Label '2c. temporal lobe' points to the inferior lateral region. A fourth label, '2d. occipital lobe', is partially visible on the right side, pointing towards the posterior pole. The brain's surface shows realistic gyri and sulci.

2b. parietal lobe

2c. temporal lobe

2d. occipital lobe



A photograph of a human brain specimen, specifically the occipital lobe, which is a reddish-brown, highly convoluted structure. It is pinned down to a white surface with several green-headed anatomical pins. A small, rectangular, light blue label is attached to the brain with a black thread. The label contains the text '2d. occipital lobe'. In the bottom right corner, there is a pile of discarded, translucent, and fibrous tissue, likely the meninges or other soft tissue removed during the dissection.

2d.

occipital lobe



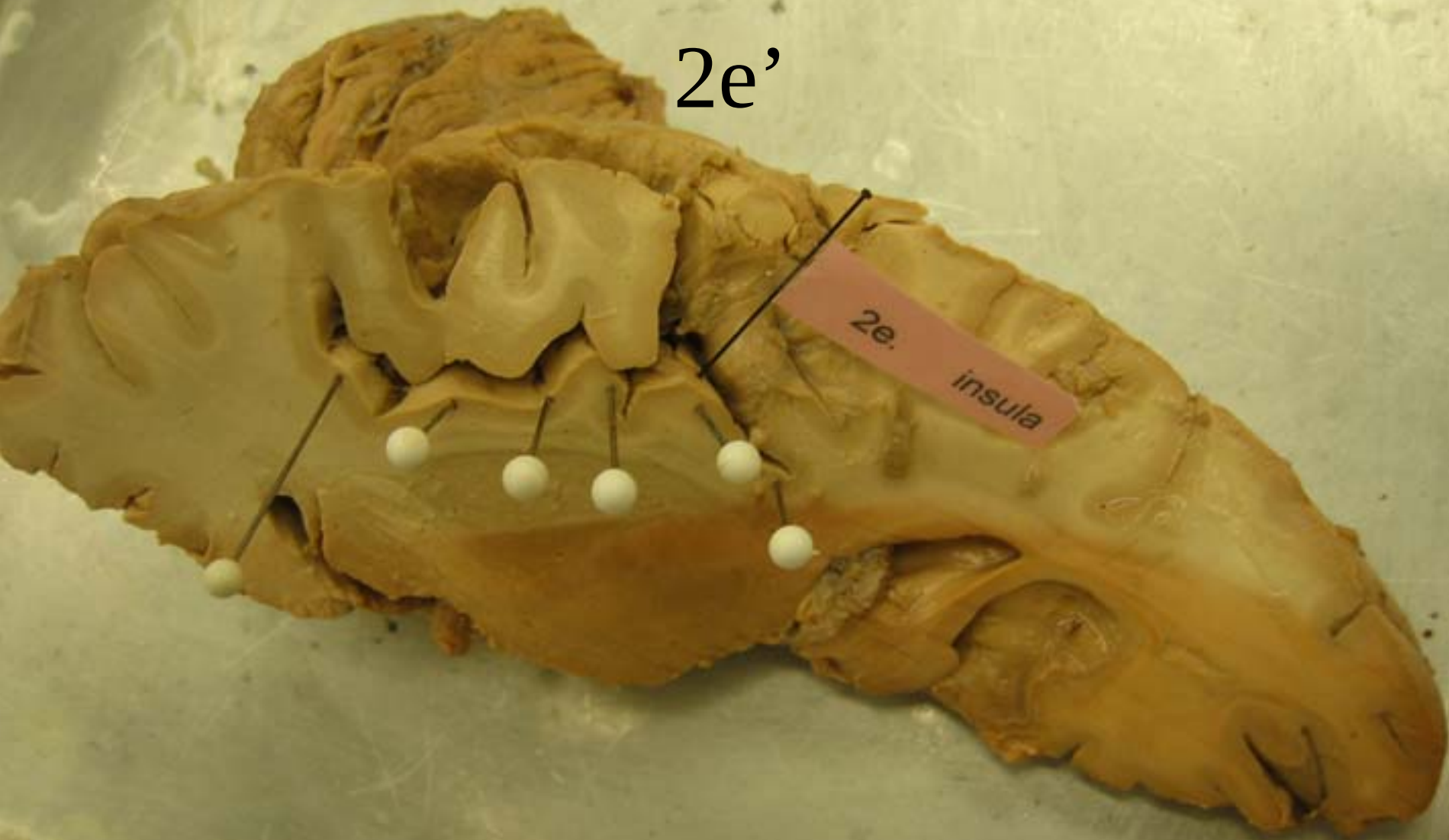
A detailed anatomical dissection of the human brain, specifically the insula. The insula is a small, almond-shaped structure located deep within the lateral sulcus. It is covered by a thick, wrinkled layer of gray matter. The dissection shows the insula's position relative to the surrounding brain structures, including the frontal and parietal lobes. A pink label with the text "2e. insula" is placed next to the structure, and a black line points to it. The brain tissue is a light tan color, and the dissection is performed on a white background.

2e. *insula*

2e'

2e.

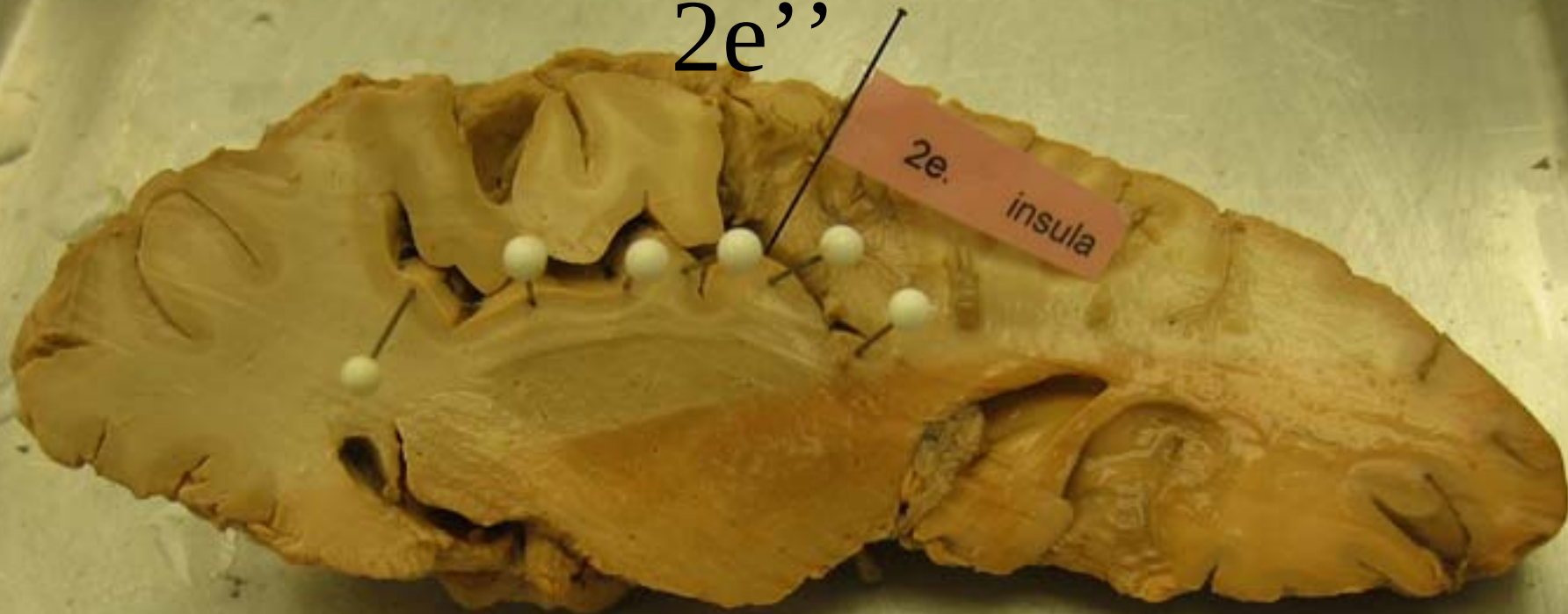
insula



2e''

2e.

insula





2f.

frontal p



2f

frontal pole



2c. cerebellum

2g. occipital pole

2f. frontal pole

2h. temporal pole

29. occipital pole



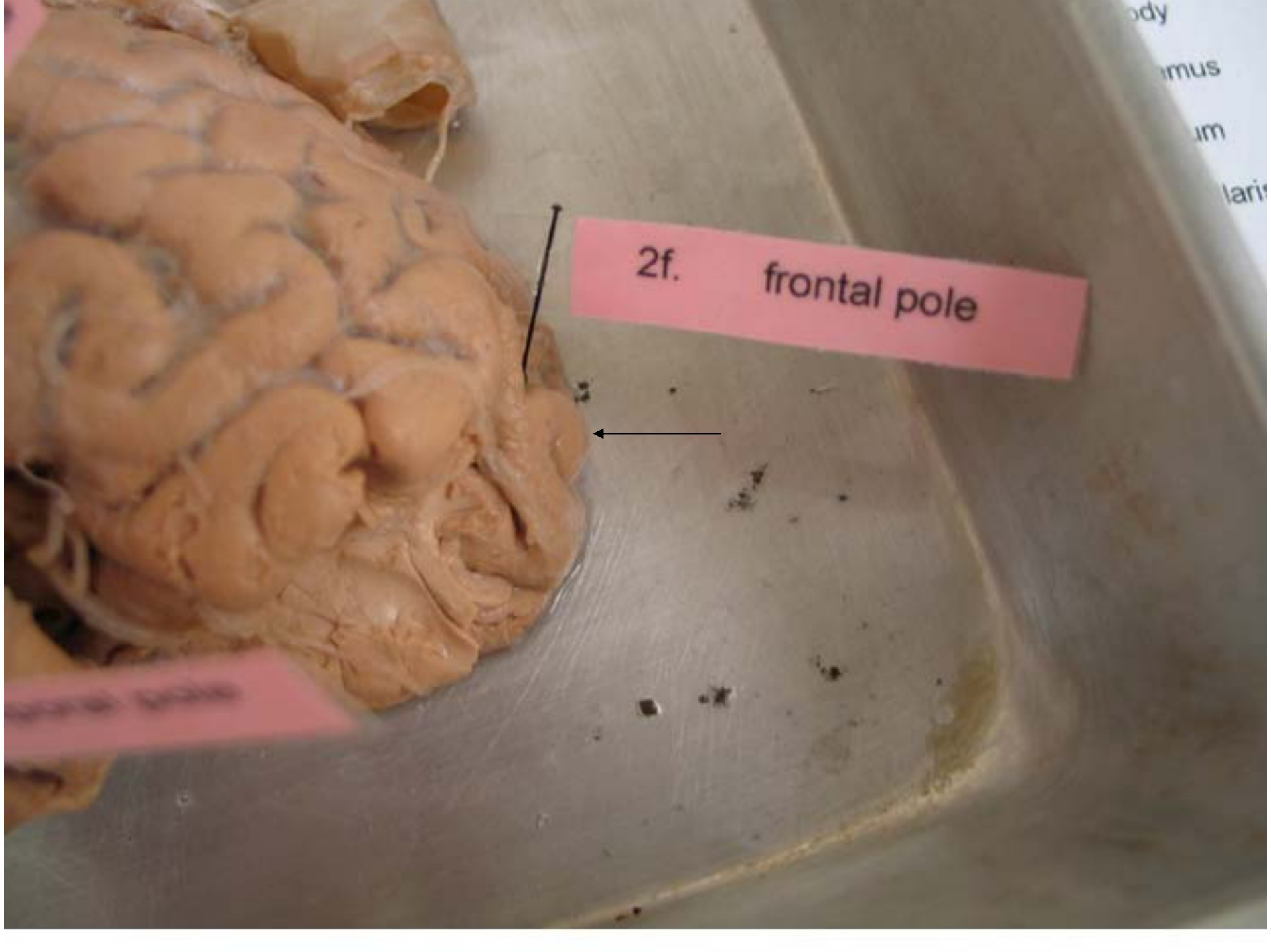


2f.

from

2h.

temporal pole



2f.

frontal pole

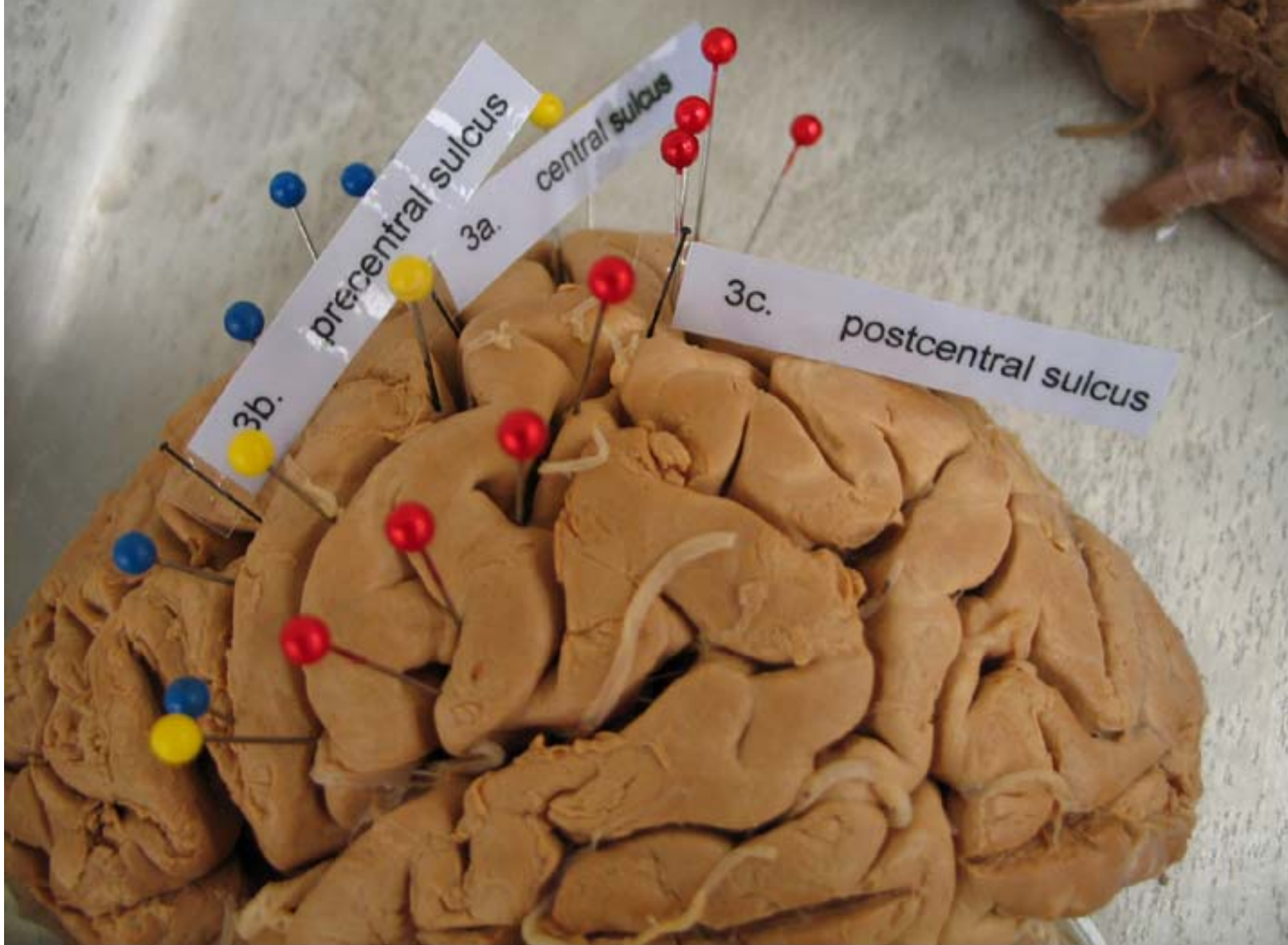


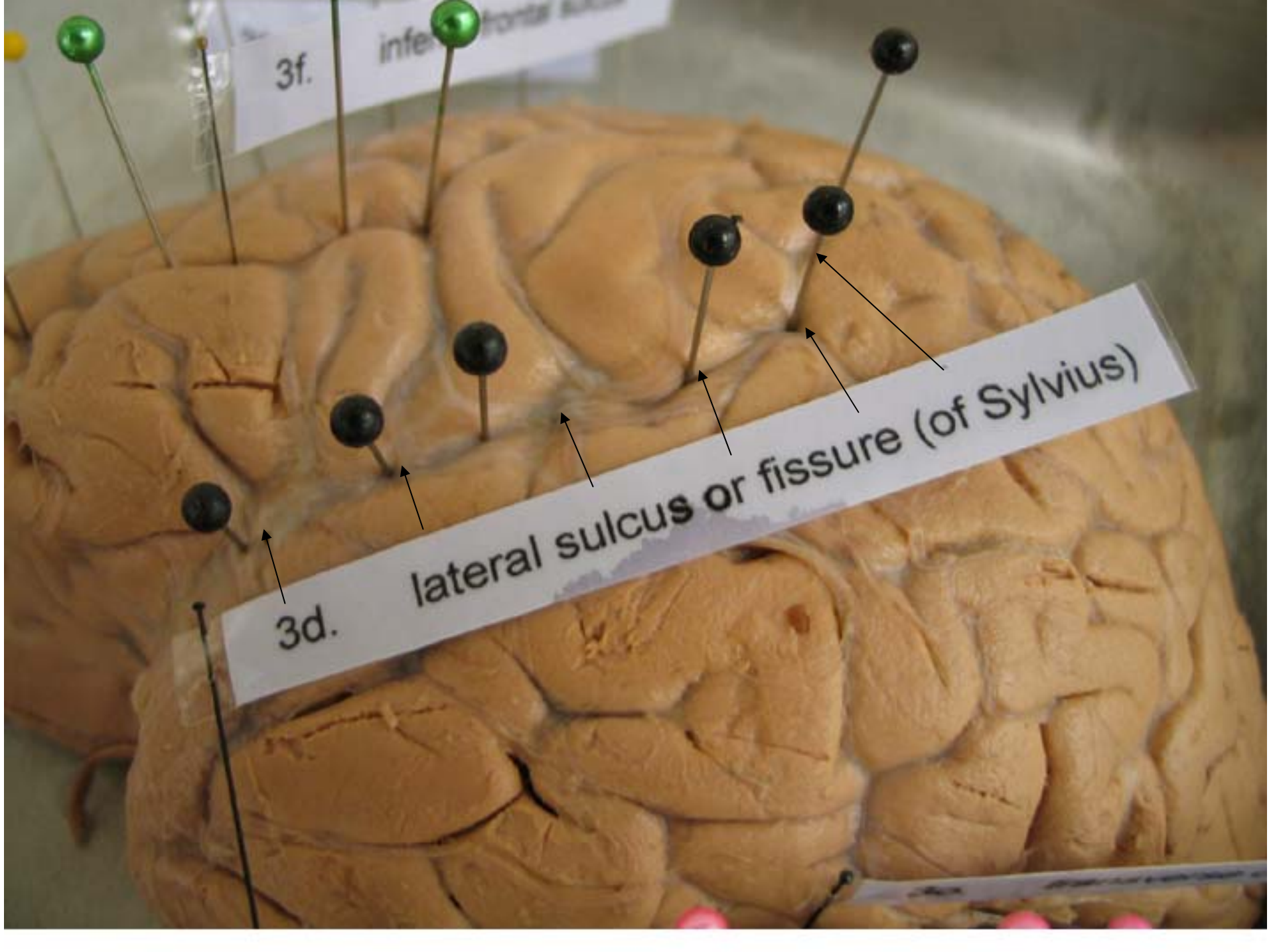
3a.

central sulcus







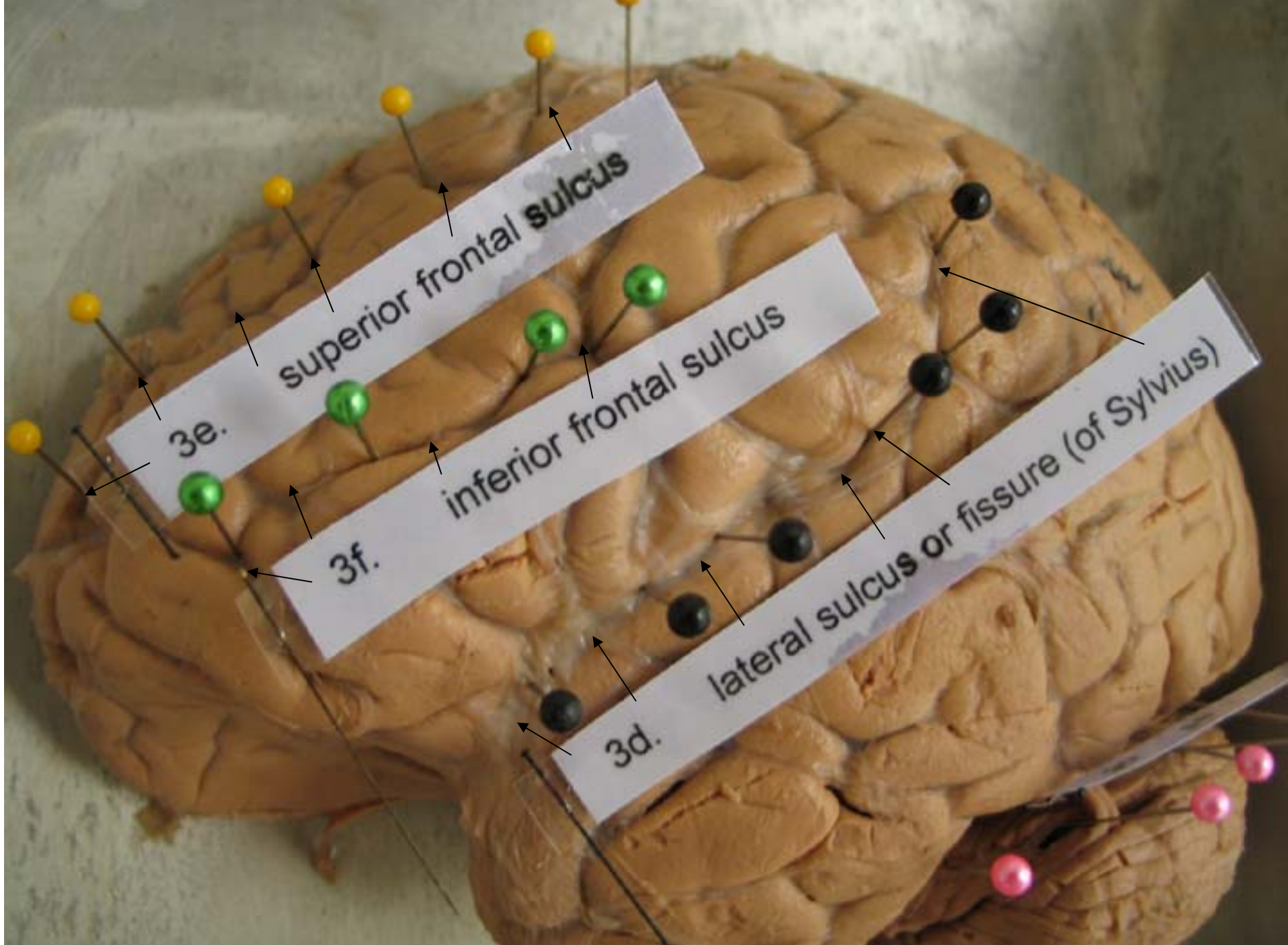


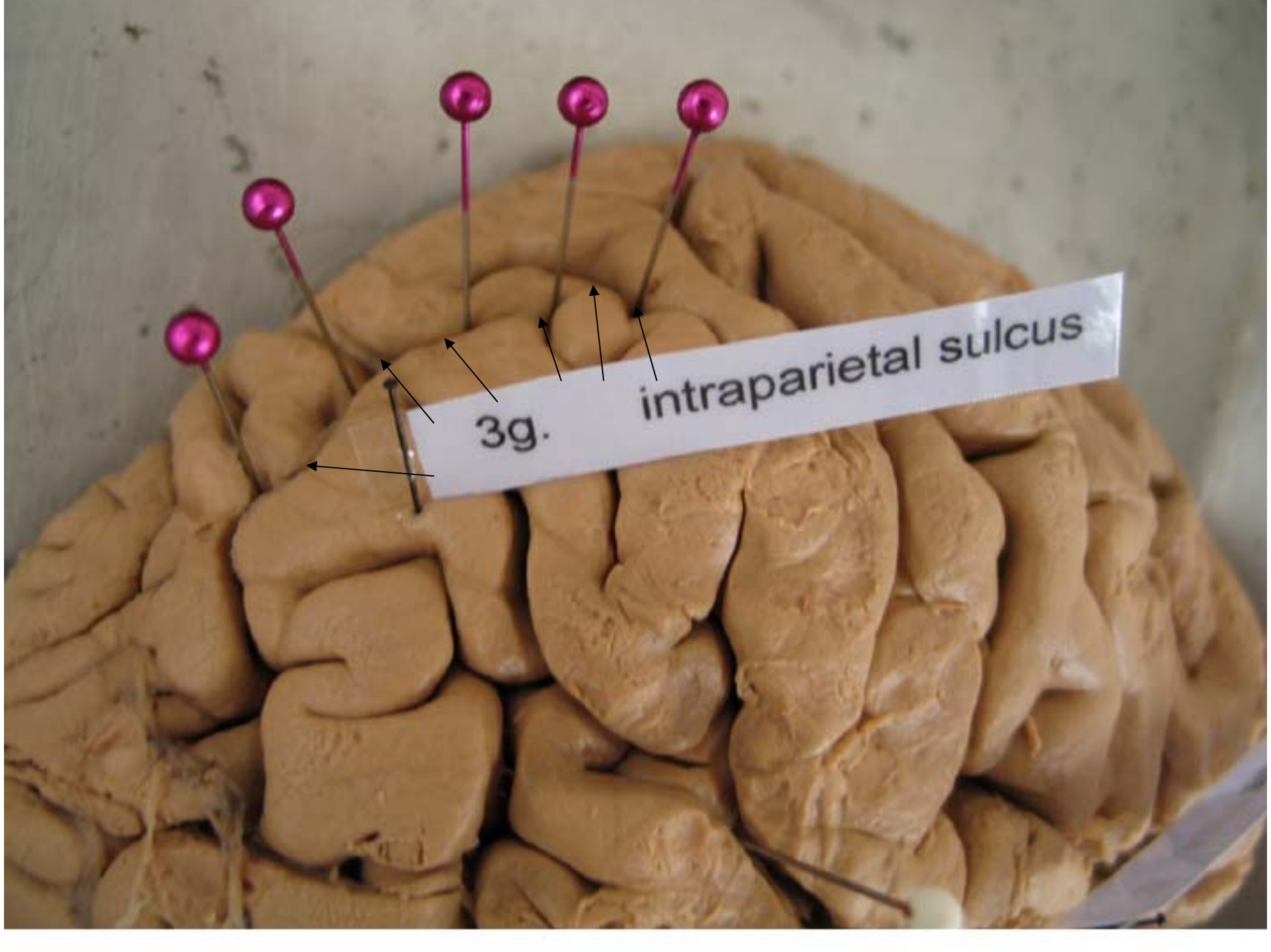
3f.

infer...

3d.

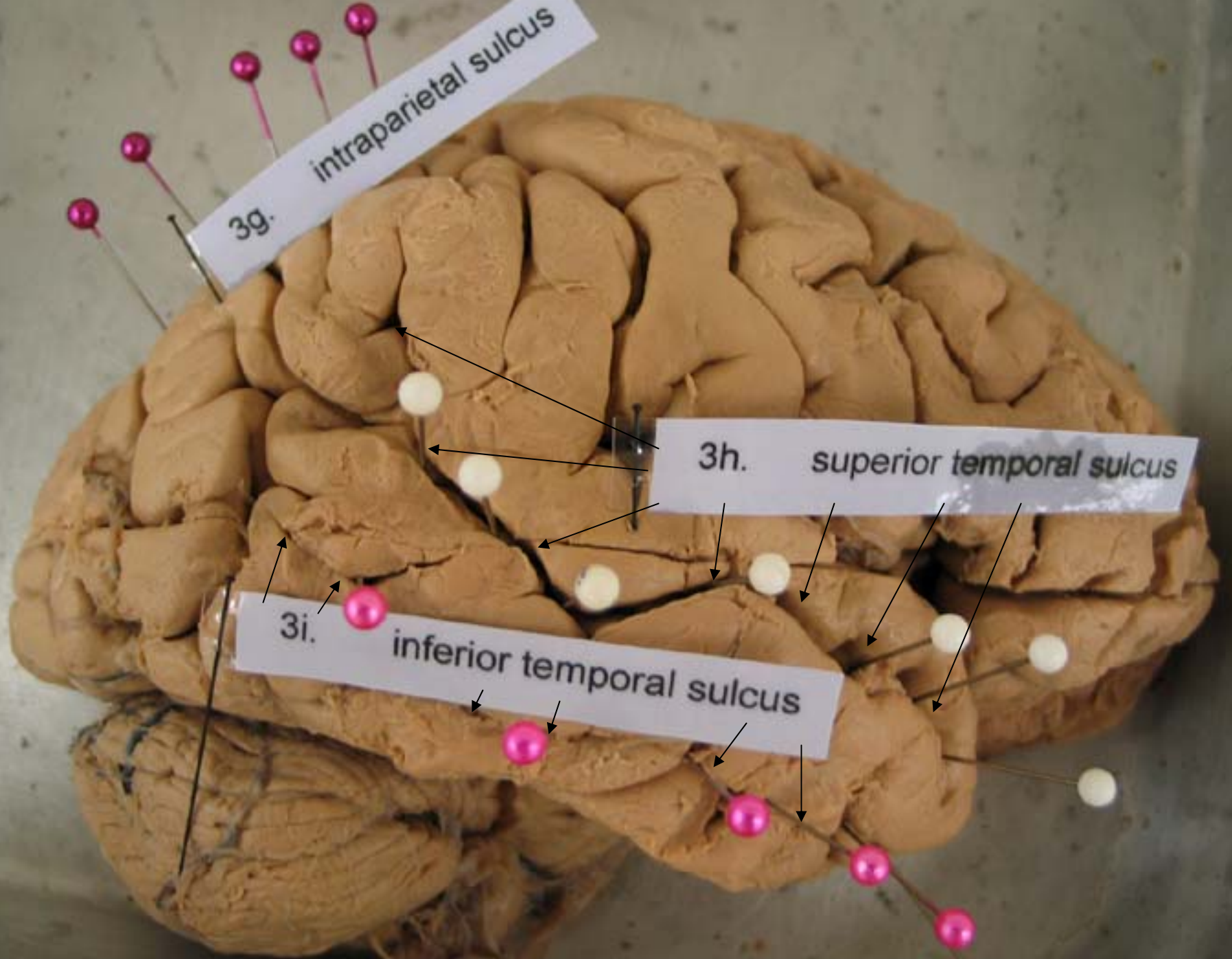
lateral sulcus or fissure (of Sylvius)





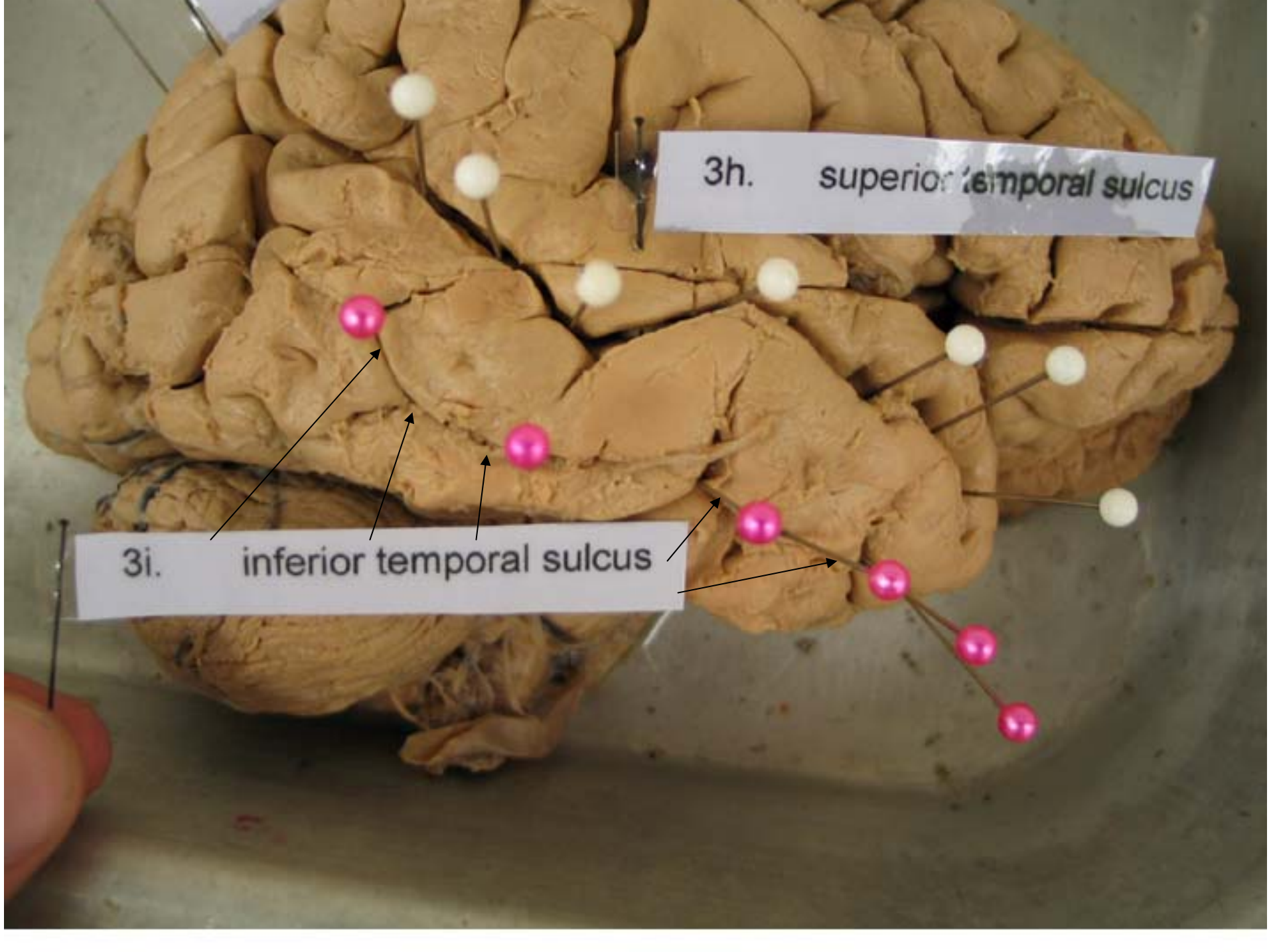
3g.

intraparietal sulcus

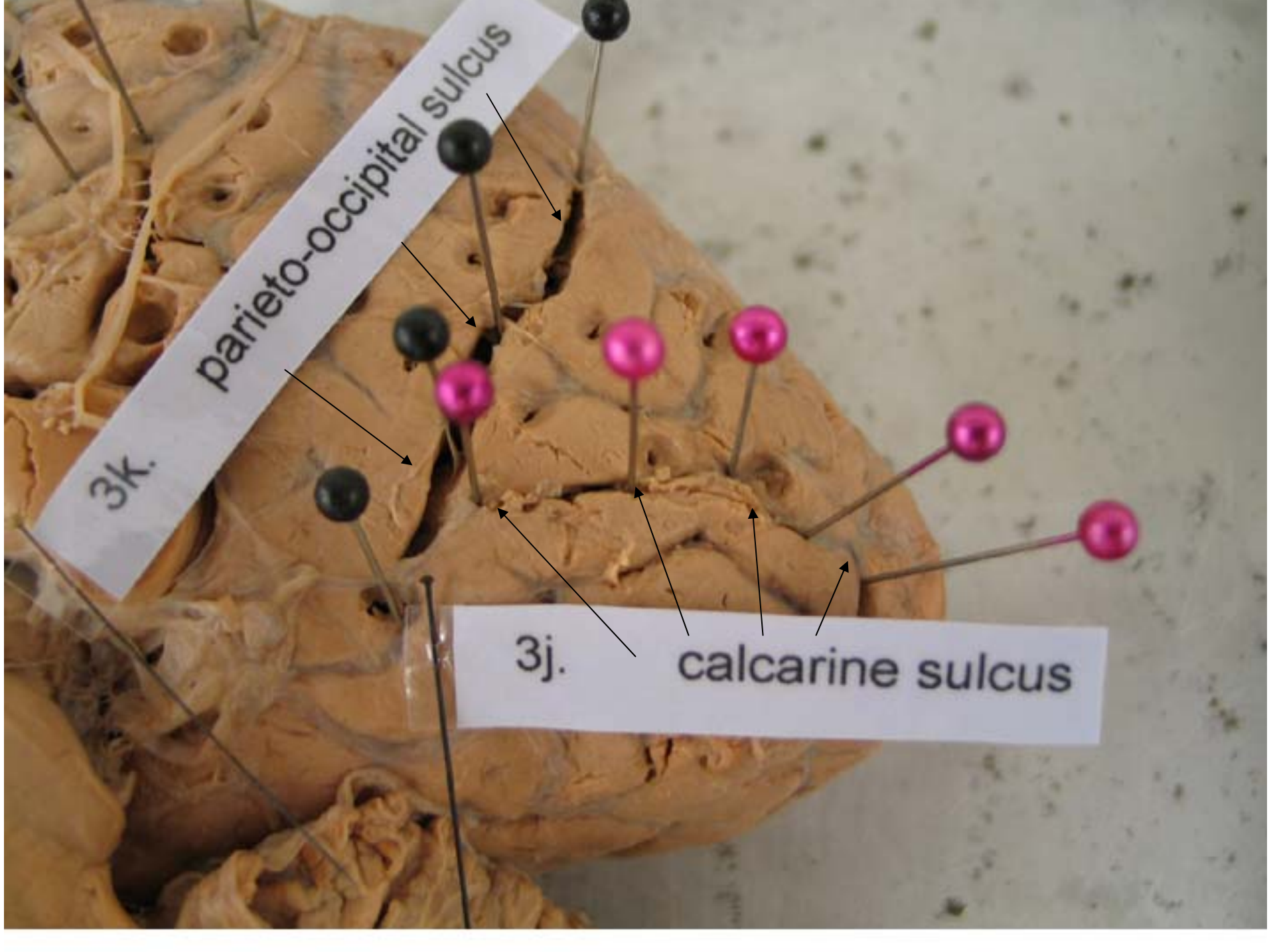


3h. superior temporal sulcus

3i. inferior temporal sulcus







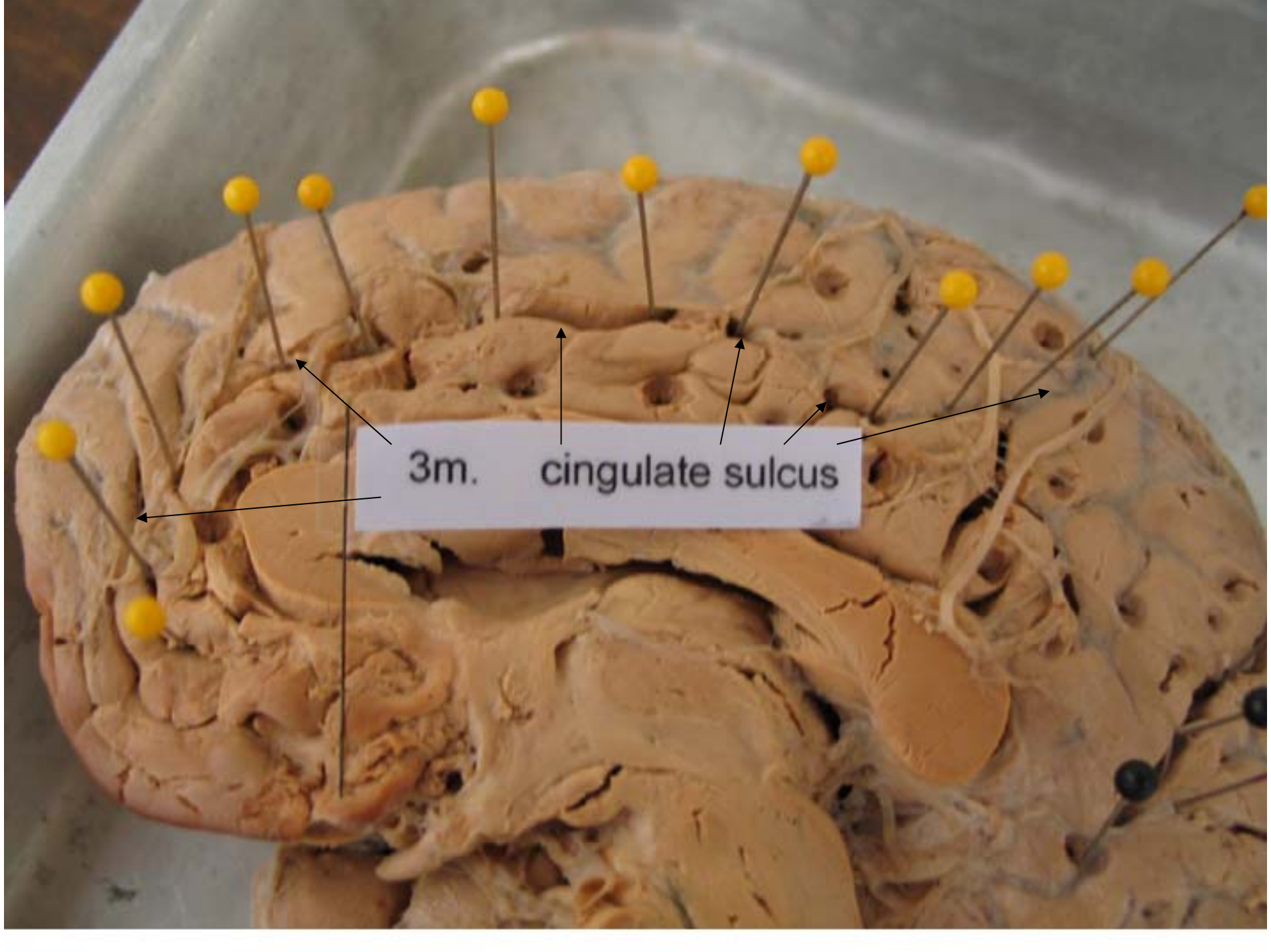
3k. parieto-occipital sulcus

3j.

calcarine sulcus

31. collateral sulcus





3m.

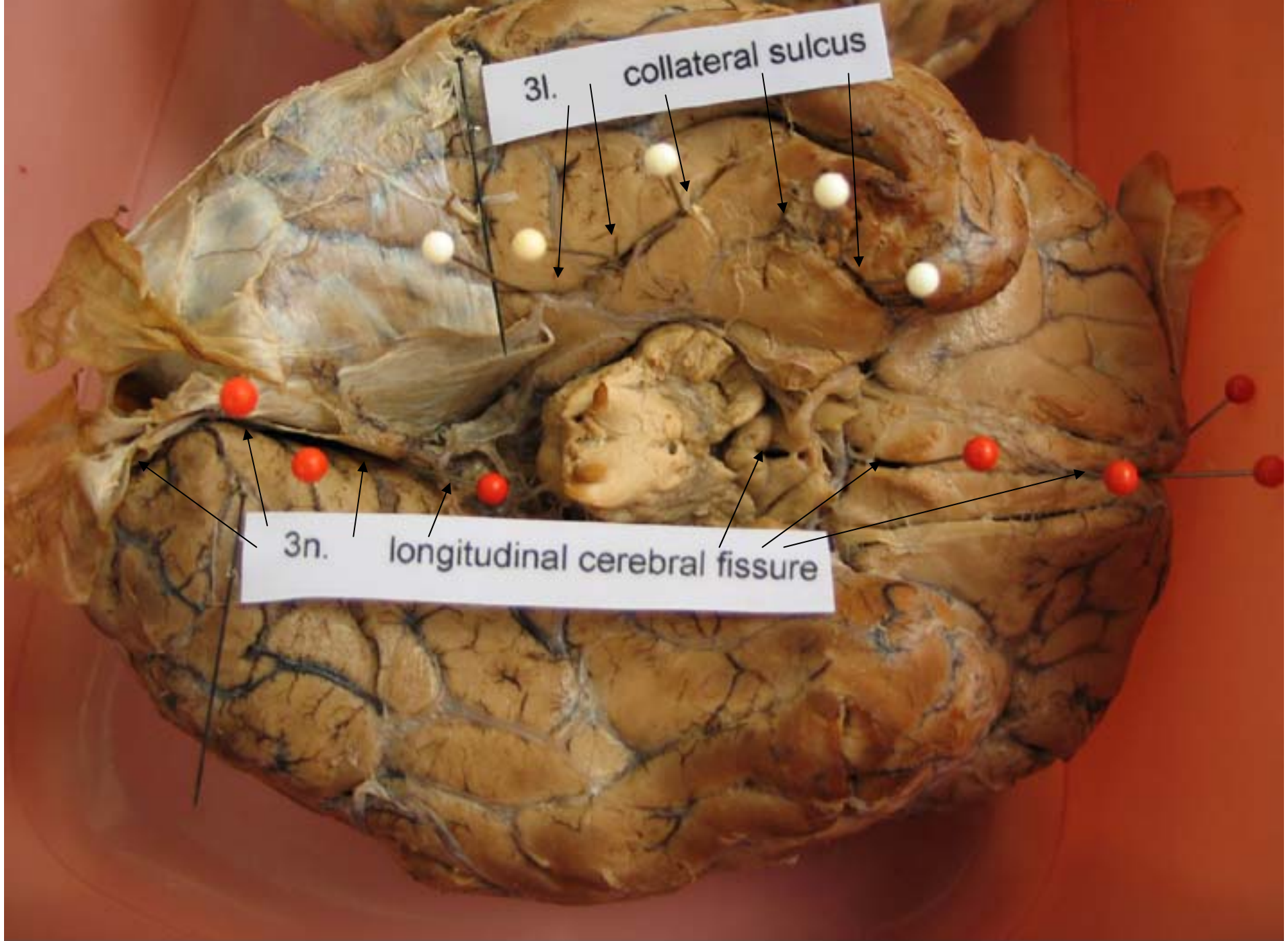
cingulate sulcus

3l.

collateral sulcus

3n.

longitudinal cerebral fissure



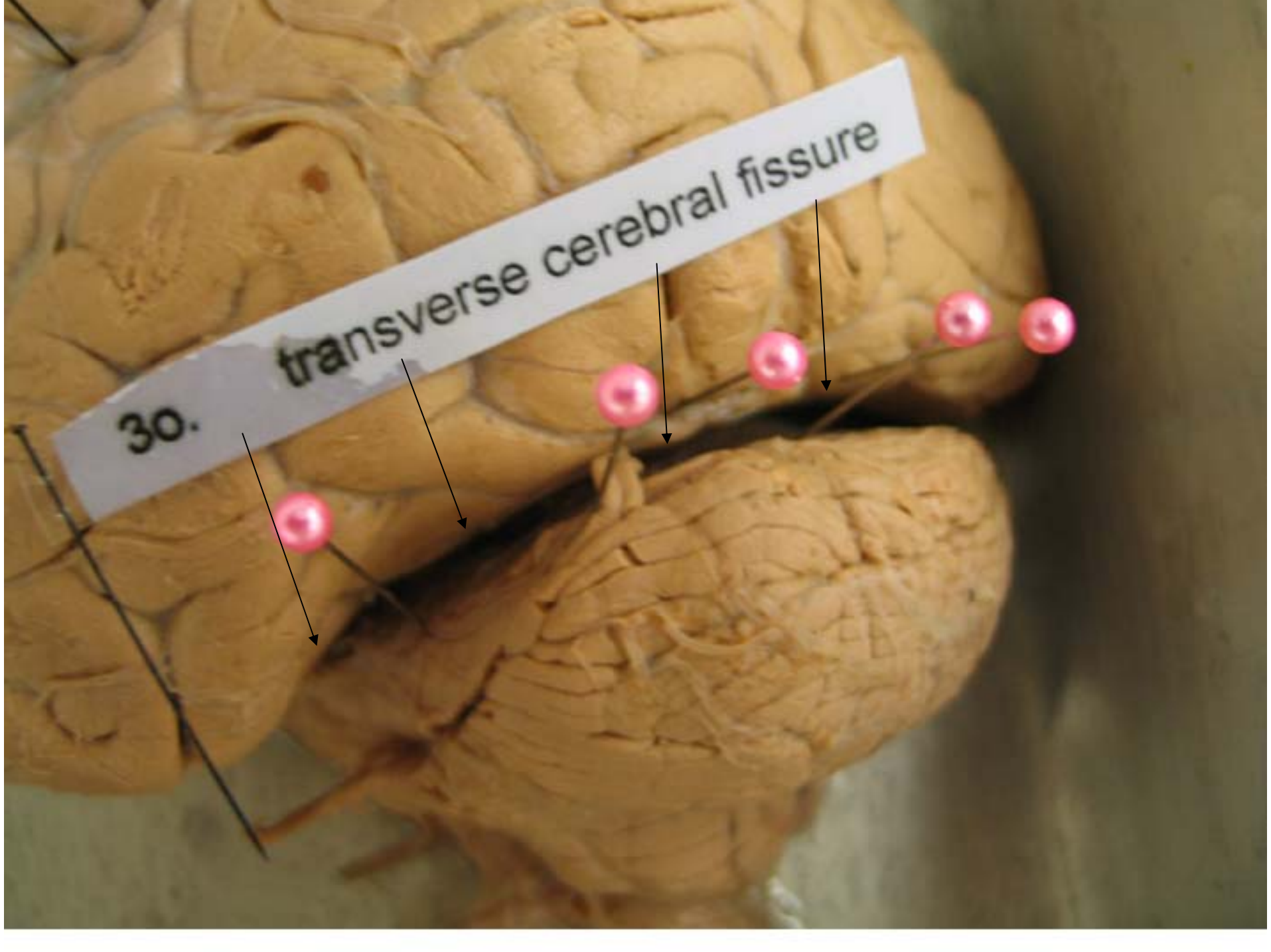


3n. longitudinal cerebral fissure

This image shows a detailed anatomical dissection of the longitudinal cerebral fissure. The brain tissue is exposed, revealing the deep groove between the two cerebral hemispheres. Several red pins are used to hold open the dissection, and black arrows point from the label to the fissure. The label '3n. longitudinal cerebral fissure' is placed horizontally across the middle of the image.

30.

transverse cerebral fissure



3e.

superior frontal

3f.

inferior frontal sulcus

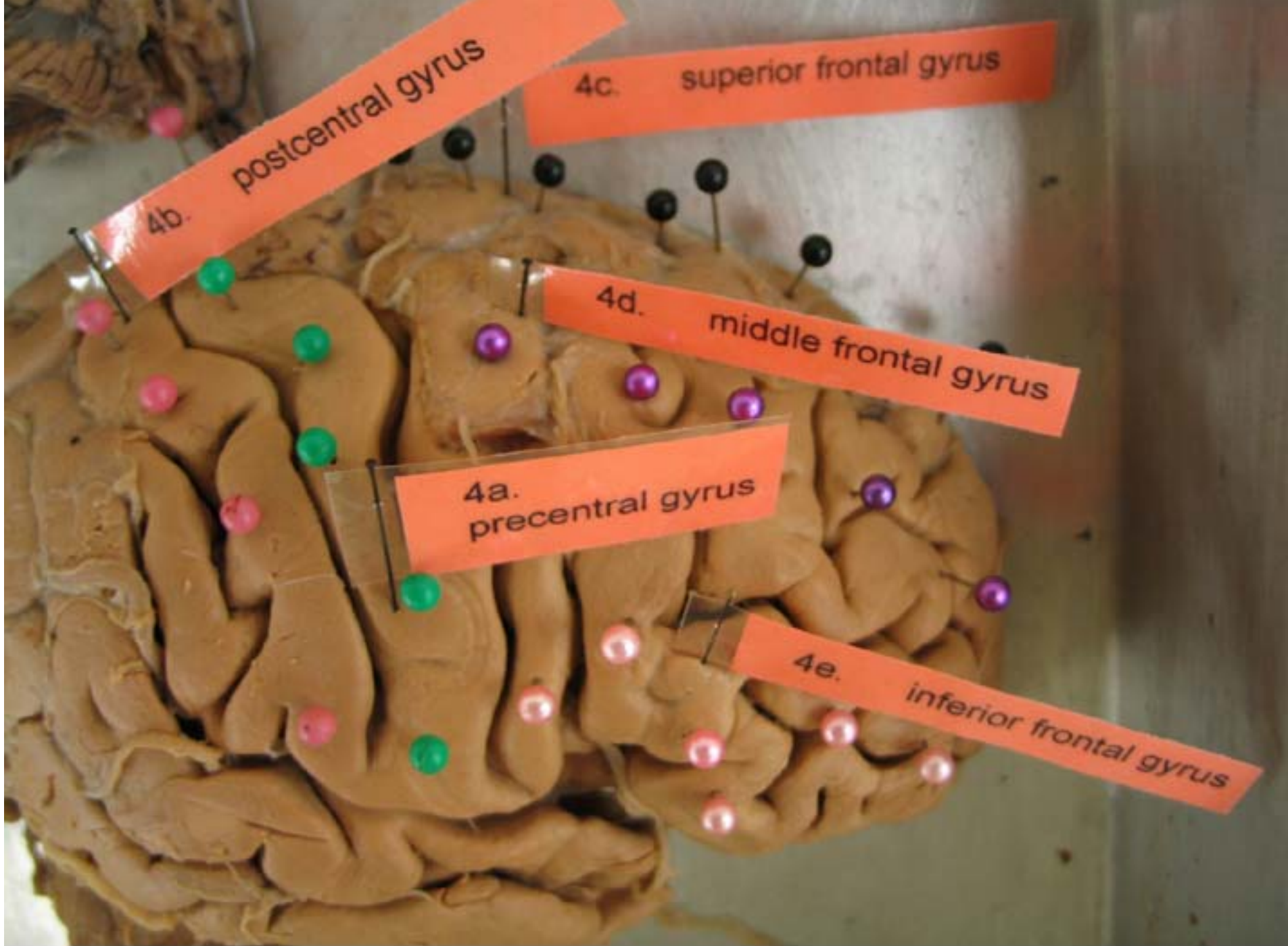
30.

transverse cerebral fissure



4a.
precentral gyrus





4b.

postcentral gyrus

4c.

superior frontal gyrus

4d.

middle frontal gyrus

4a.

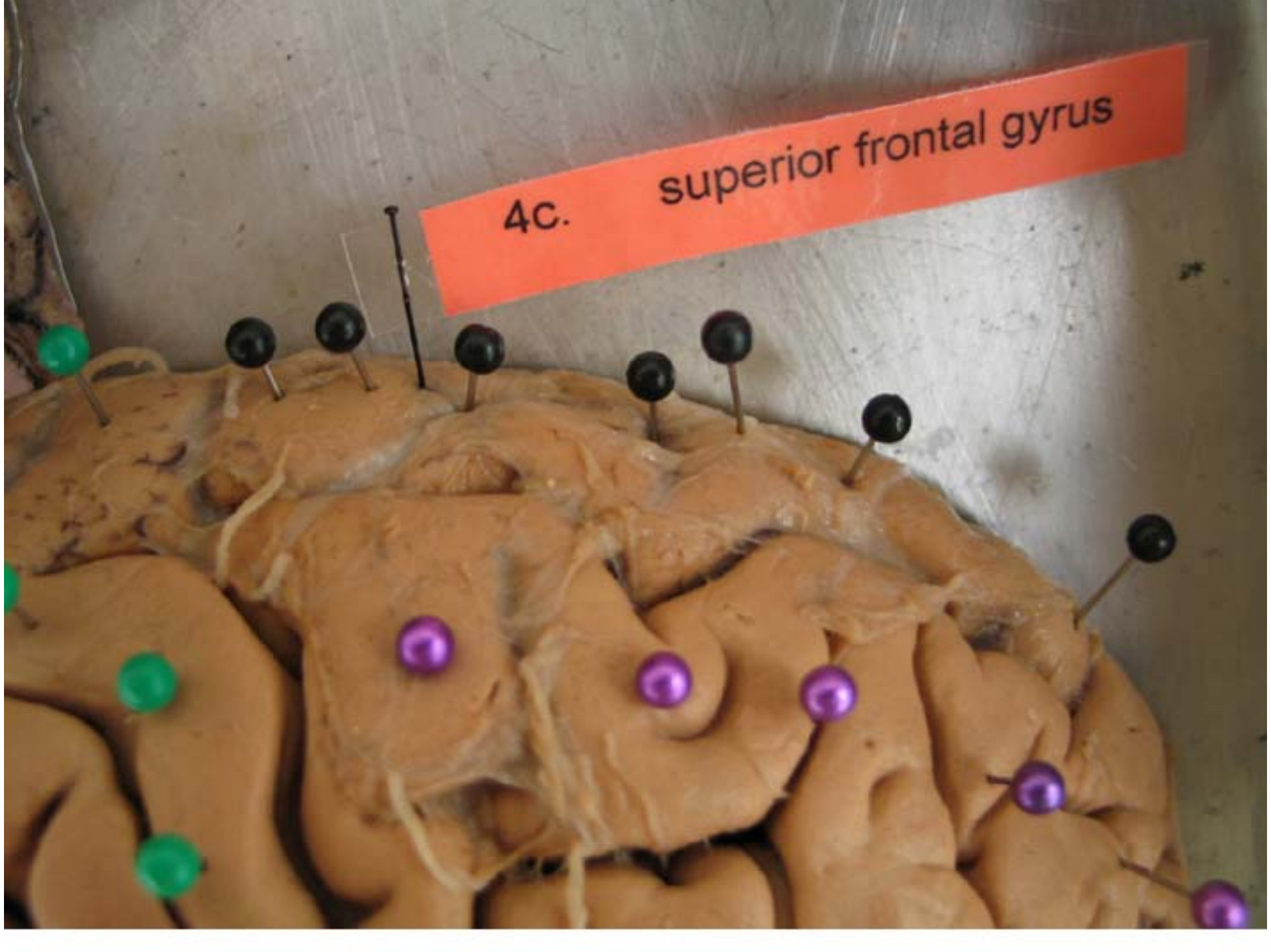
precentral gyrus

4e.

inferior frontal gyrus

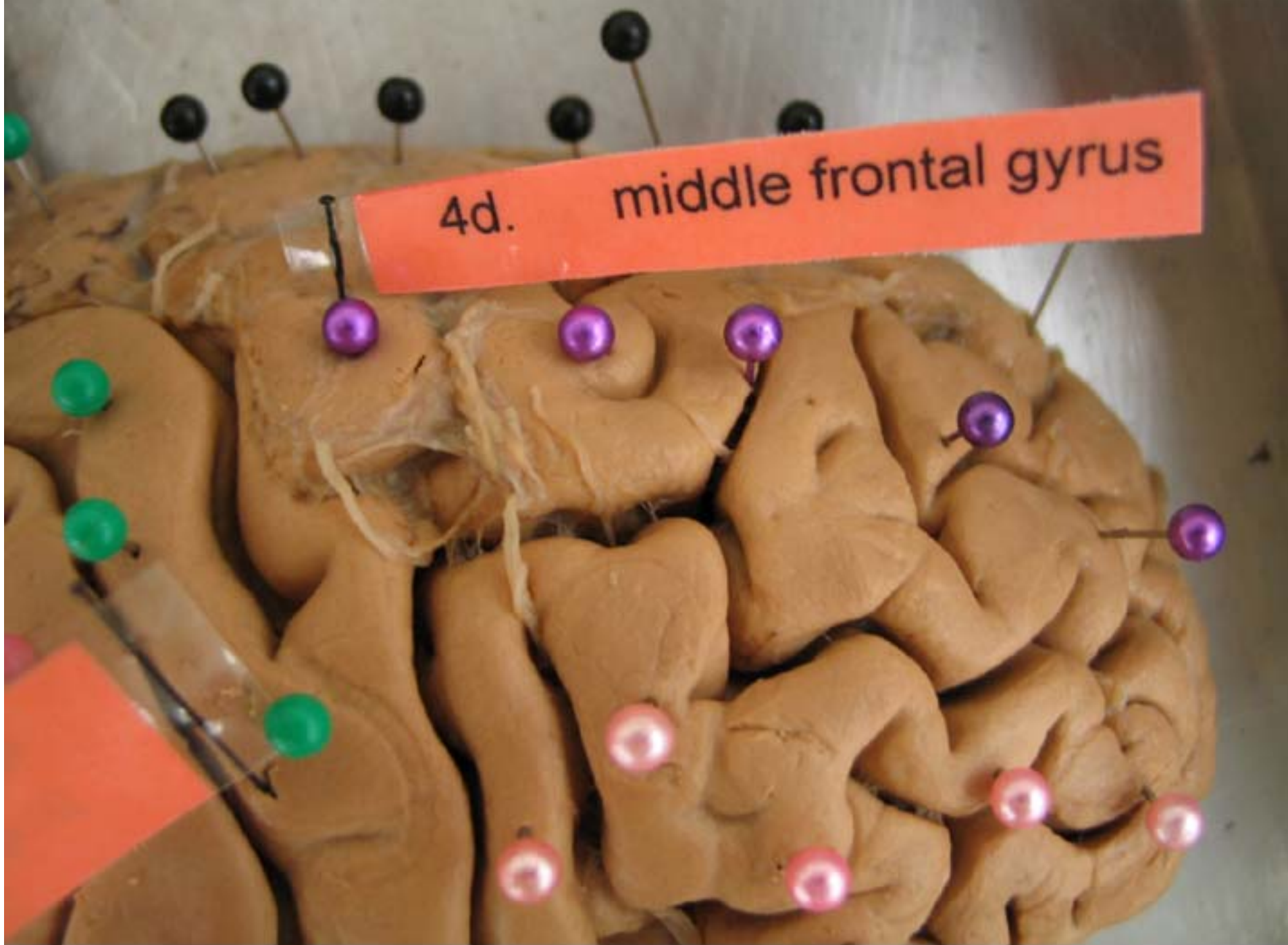
4c.

superior frontal gyrus



4d.

middle frontal gyrus

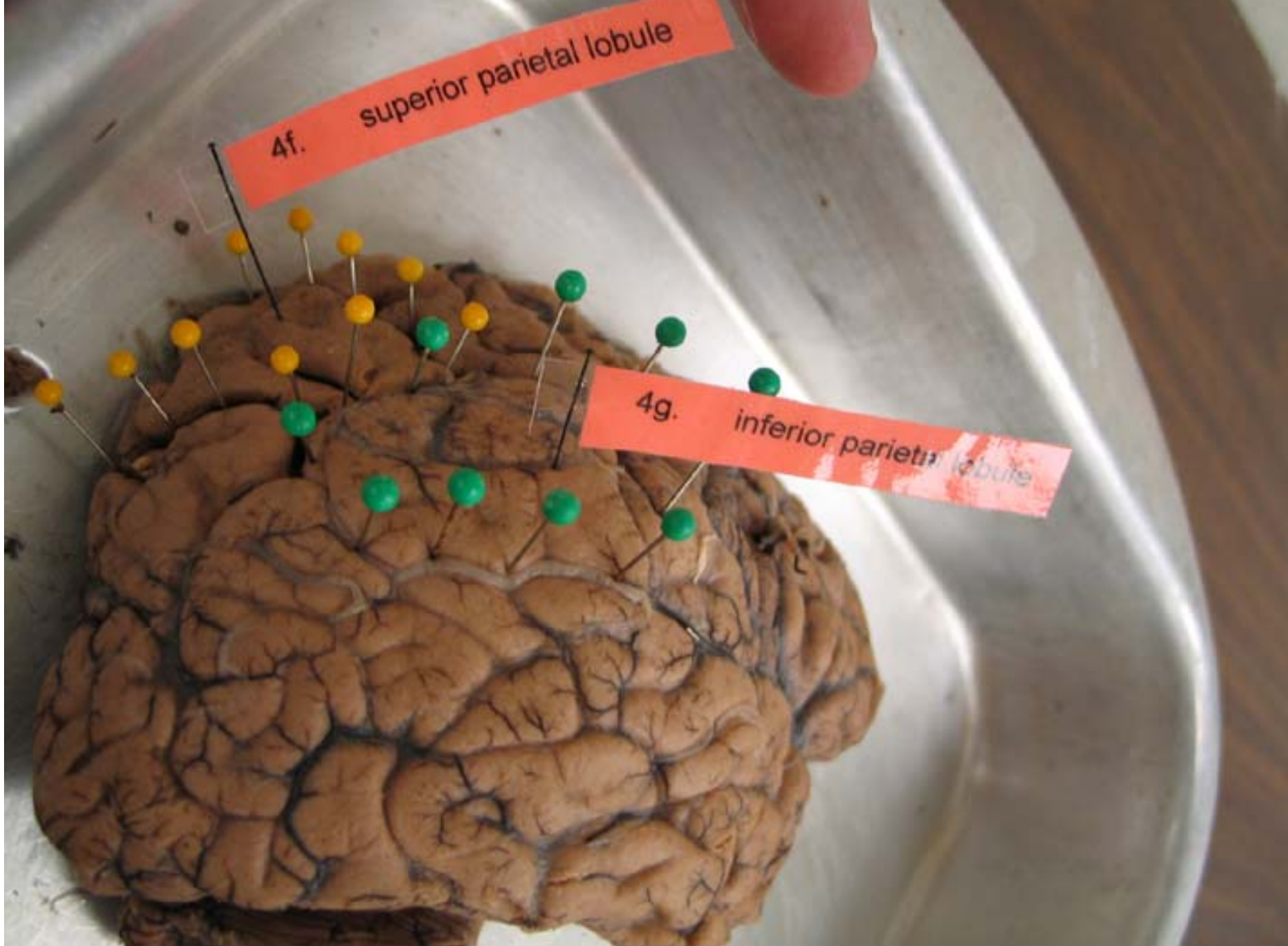


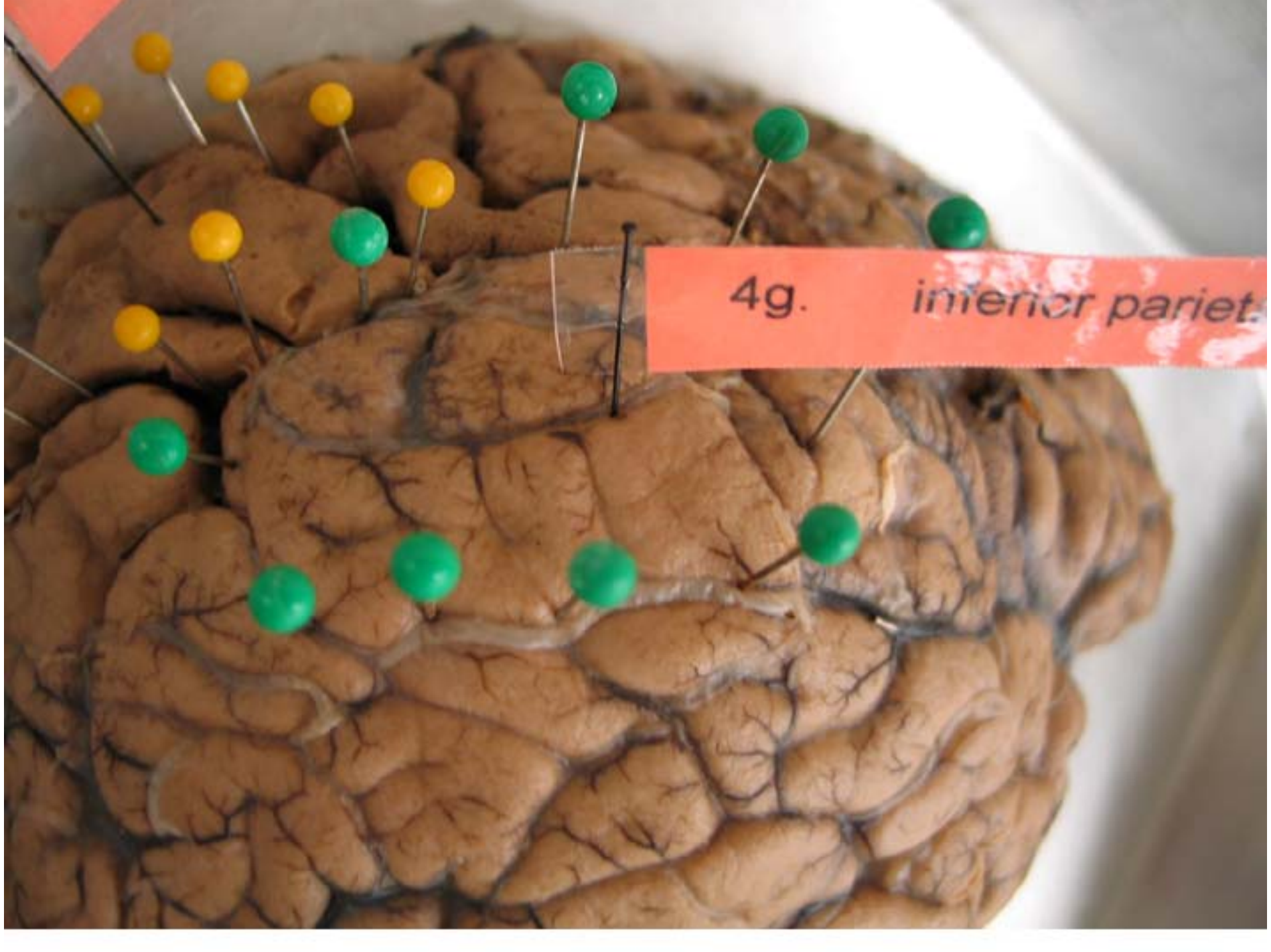
4e. inferior frontal gyrus



4f. superior parietal lobule

4g. inferior parietal lobule





4g.

inferior pariet.

4f.

superior parietal lobule

4g.

inferior parietal lobule



4g2. angular gyrus

4g1. supramarginal gyrus

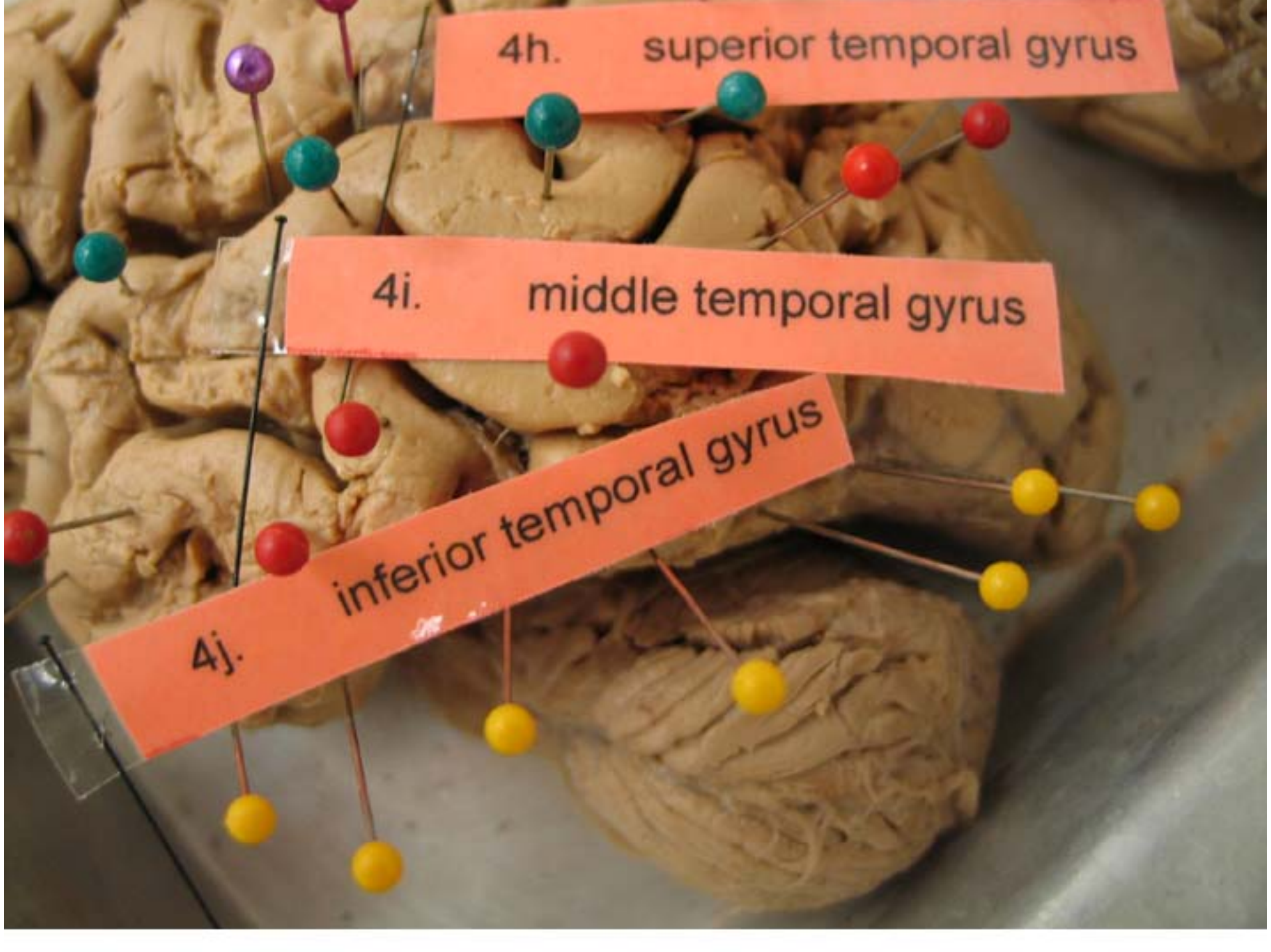


An anatomical model of a human brain, likely made of a light brown, textured material like clay or plaster. The model is shown from a superior-lateral perspective, highlighting the cerebral cortex with its characteristic gyri and sulci. Several pins with colored heads (pink, white, red, and teal) are inserted into the model to mark specific anatomical locations. Two orange labels with black text are placed over the model. The label '4g2. angular gyrus' is positioned horizontally across the upper middle of the image. The label 'amarginal gyrus' is positioned diagonally in the lower-left corner. The background is a plain, light-colored surface.

4g2. angular gyrus

amarginal gyrus





4h. superior temporal gyrus

This image shows a detailed anatomical dissection of the temporal lobe of a brain specimen. The dissection is pinned down with numerous colored pushpins (purple, teal, red, and yellow). Three labels are visible: '4h. superior temporal gyrus' at the top, '4i. middle temporal gyrus' in the middle, and '4j. inferior temporal gyrus' at the bottom. The brain tissue is light tan and shows the characteristic gyri and sulci. The dissection is set against a light-colored background.

4i. middle temporal gyrus

4j. inferior temporal gyrus



4h. superior temporal gyrus

The image shows a detailed anatomical dissection of a human brain specimen, specifically the temporal lobe. The brain is pinned down to a white surface with numerous colored pins (purple, teal, red, yellow). Three labels are visible, pointing to specific gyri: '4h. superior temporal gyrus' (top), '4i. middle temporal gyrus' (middle), and '4j. inferior temporal gyrus' (bottom). The brain tissue is light brown and shows clear gyral and sulcal patterns.

4i. middle temporal gyrus

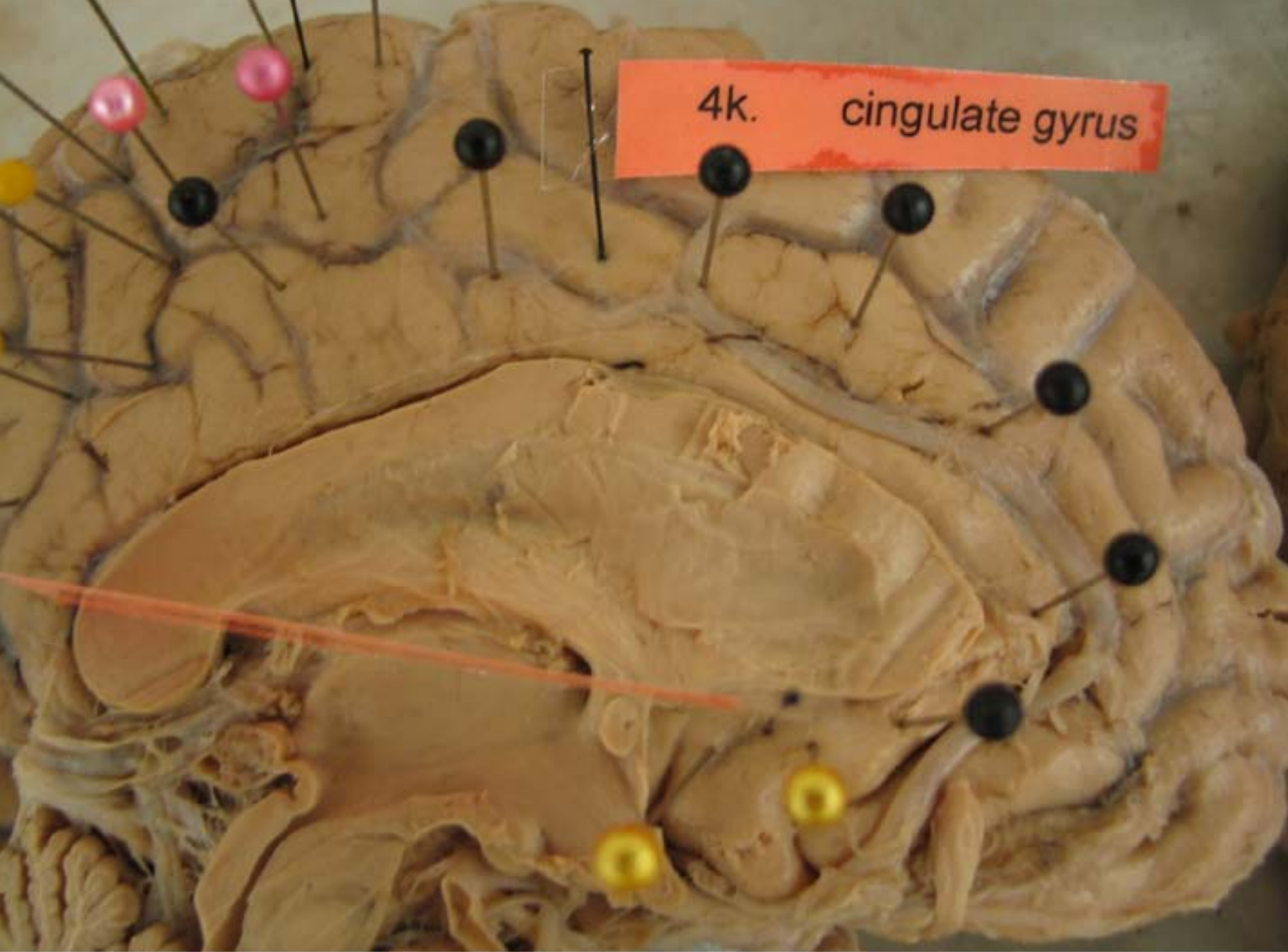
4j. inferior temporal gyrus

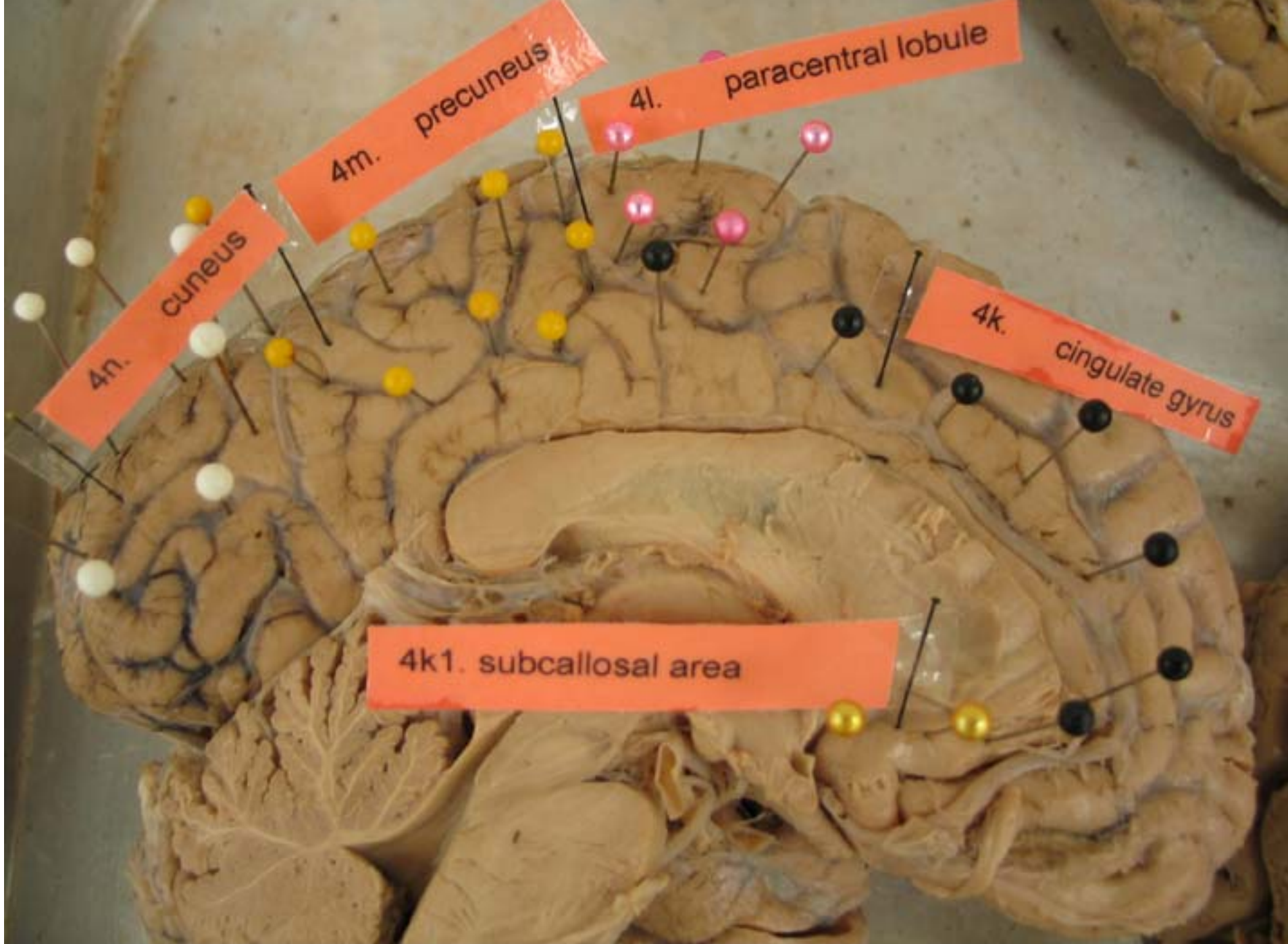
4h1. transverse temporal gyri



4k.

cingulate gyrus





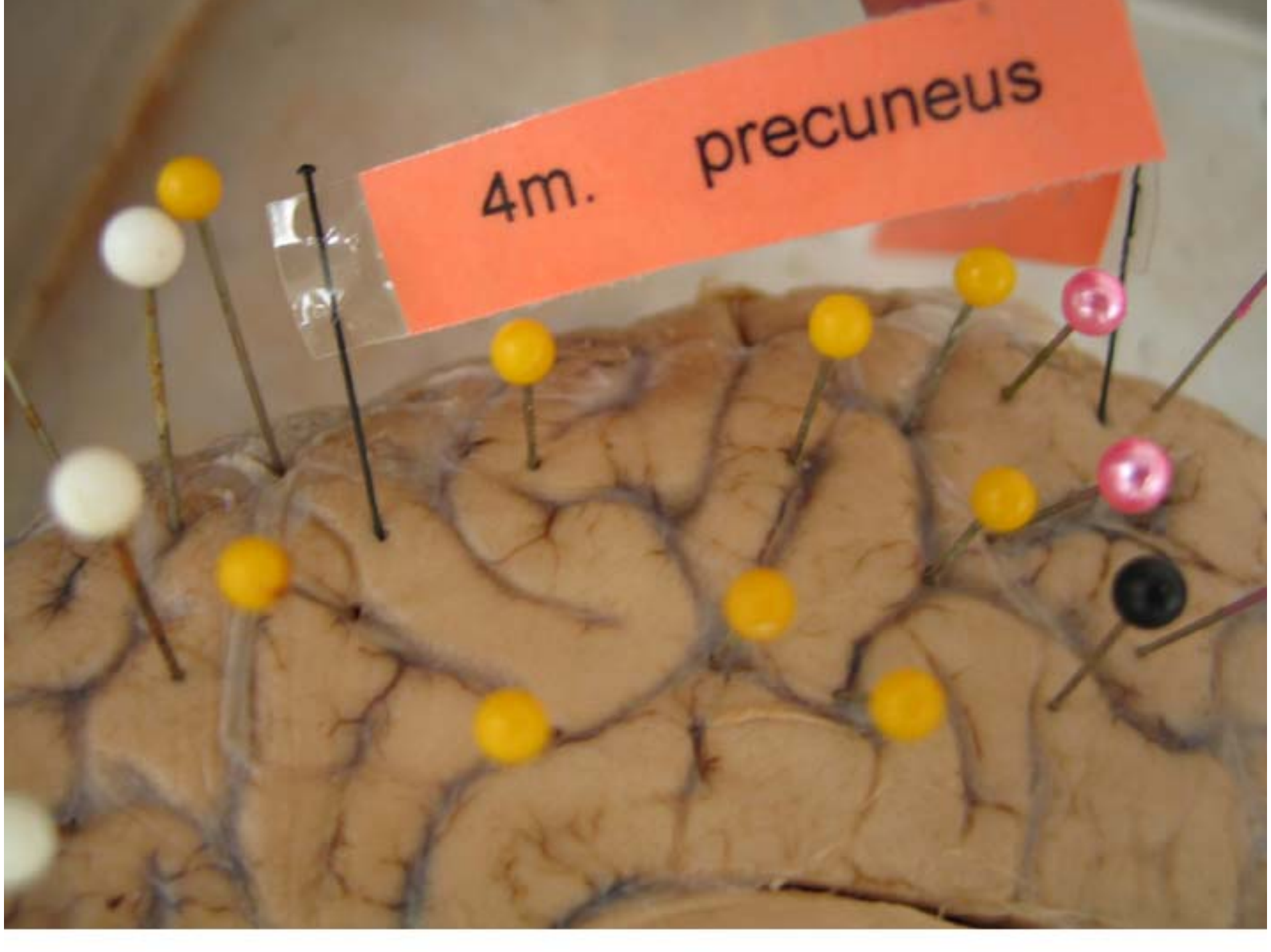
4l.

paracentral lobule

4k.

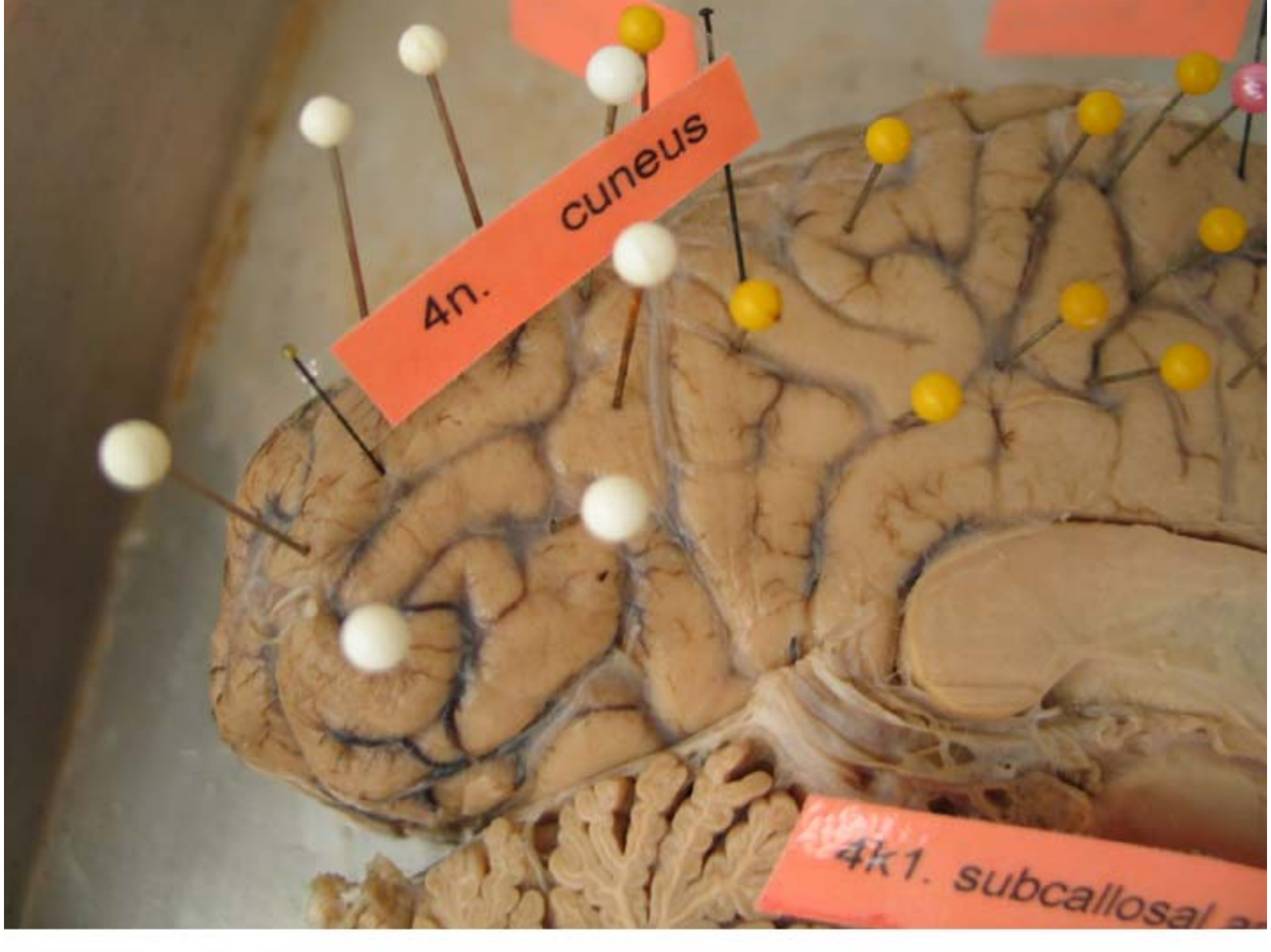
4m.

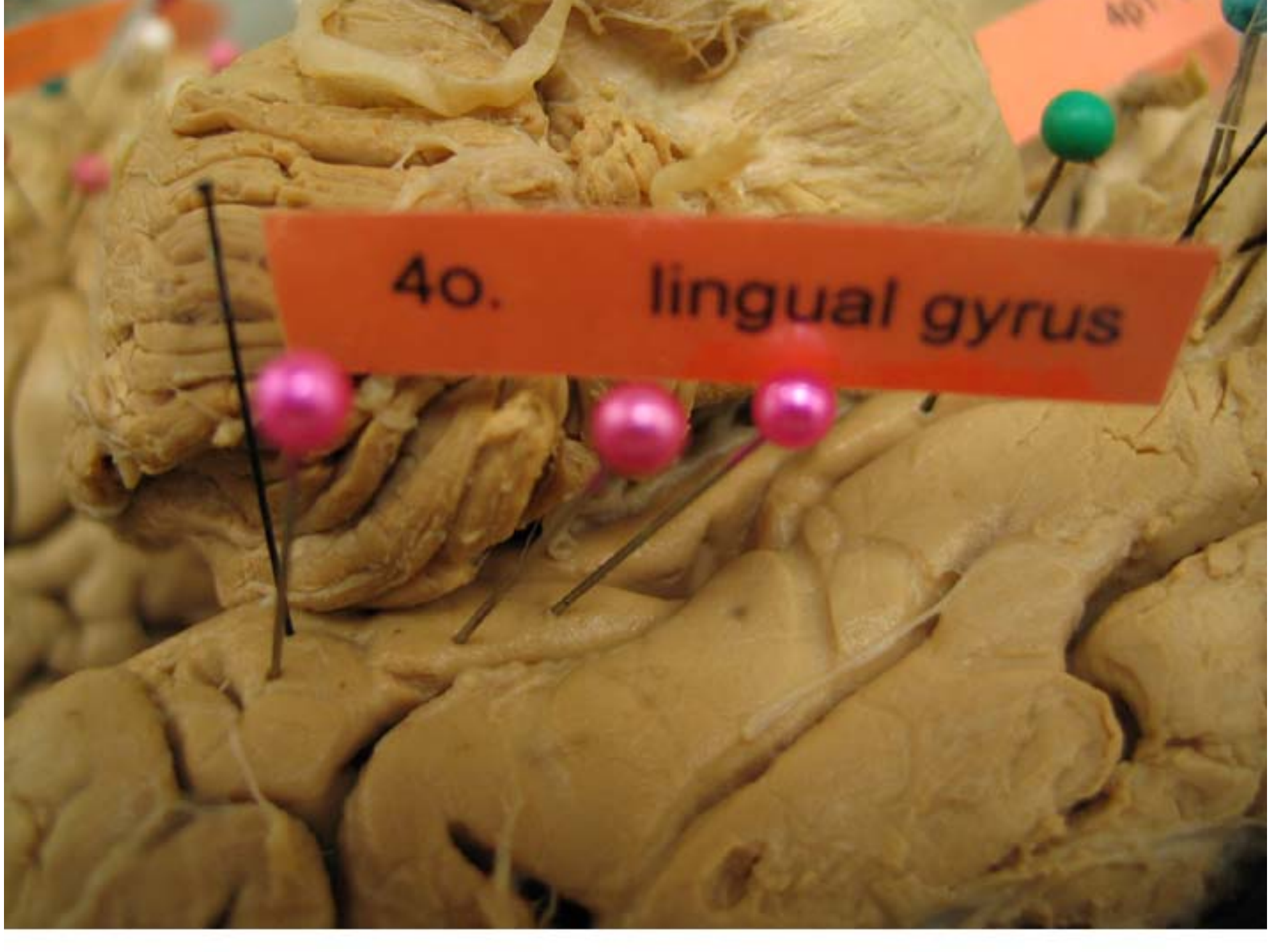
precuneus



4n. cuneus

4k1. subcallosal

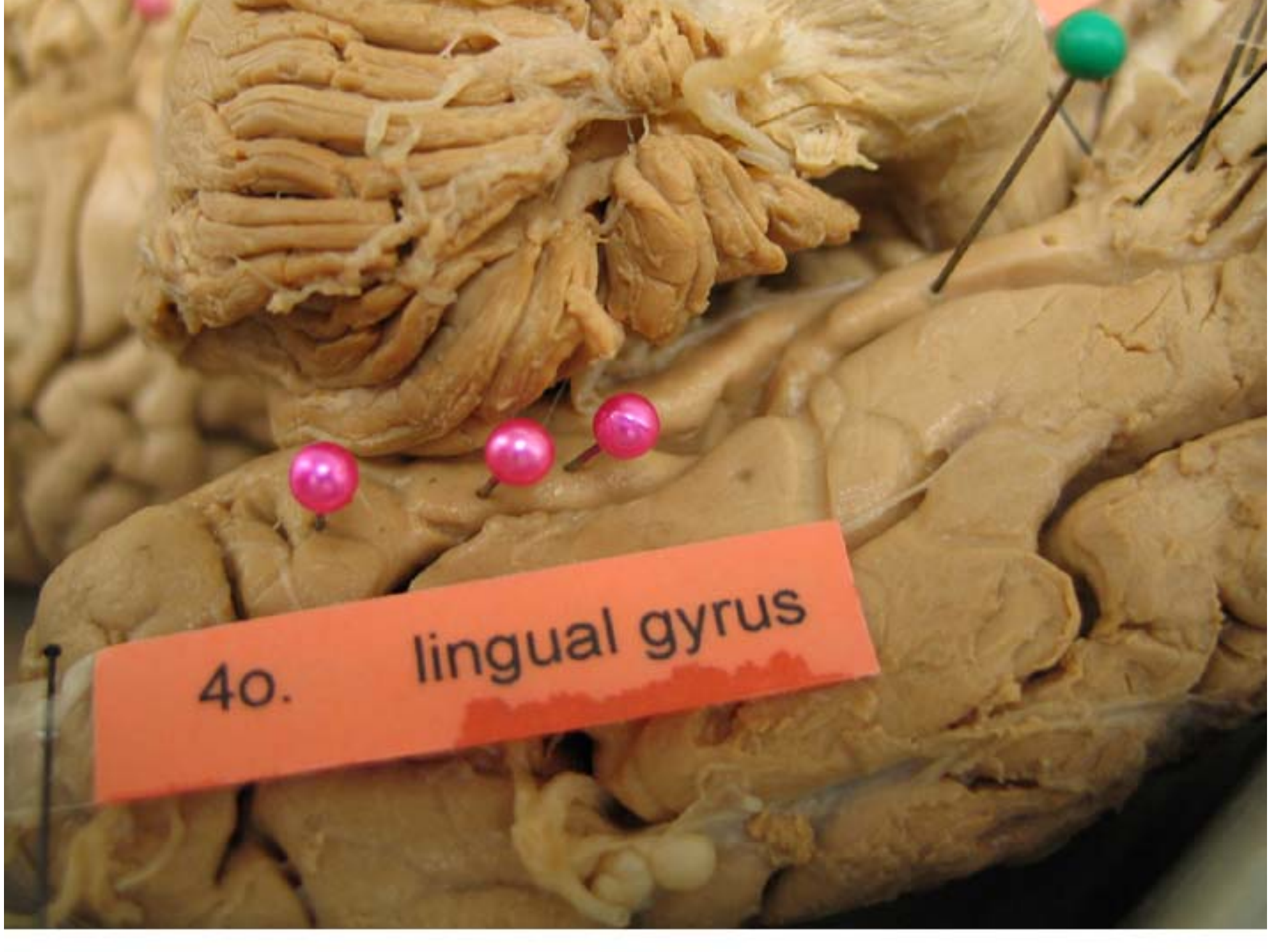




40.

This image shows a close-up of a brain specimen, likely a section of the temporal lobe, with the lingual gyrus highlighted. The tissue is a light tan color and has a wrinkled, gyri-like appearance. Several anatomical pins are used to hold the specimen open: three pink pins are visible in the foreground, and a green pin is visible in the upper right. A black line from the label points to the specific gyrus. The background is slightly blurred, showing other parts of the dissection.

lingual gyrus



This image shows a detailed anatomical dissection of a brain specimen. The lingual gyrus is the primary focus, with an orange label identifying it. The dissection reveals the underlying white matter and the complex arrangement of the corpus callosum, which appears as a dense, fibrous structure. Several colored pins (pink, green, and black) are used to hold the dissection open, providing a clear view of the internal structures. The label '4o.' is also visible, likely indicating a specific anatomical level or section.

4o.

lingual gyrus



4p.

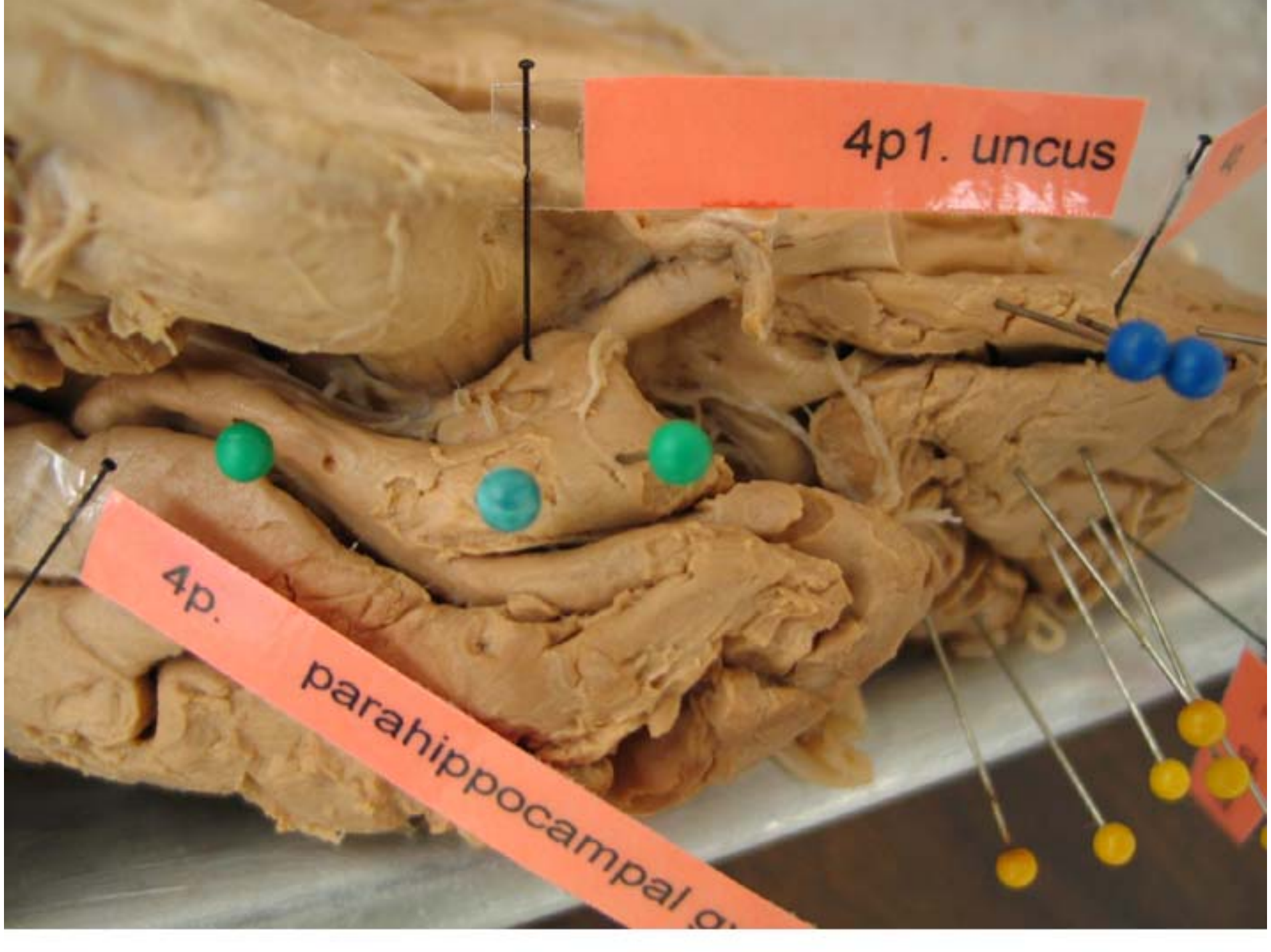
This image shows a close-up of a preserved anatomical specimen, likely a section of the human brain, specifically the parahippocampal gyrus. The tissue is a light tan color and has a wrinkled, folded appearance. Several green-headed pins are used to hold the specimen open. An orange label with black text is placed over the lower part of the specimen.

parahippocampal gyrus

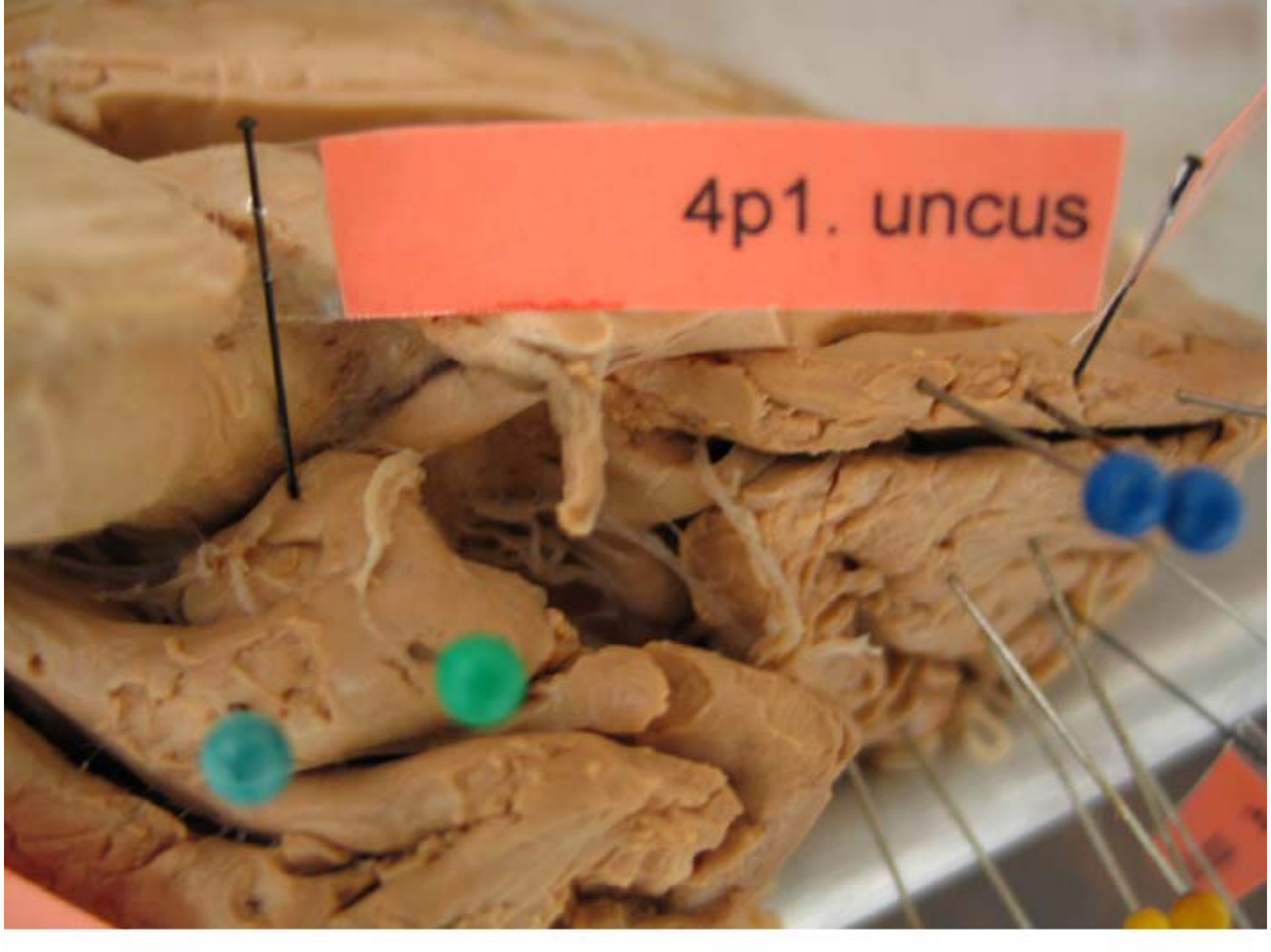
4p1. uncus

4p.

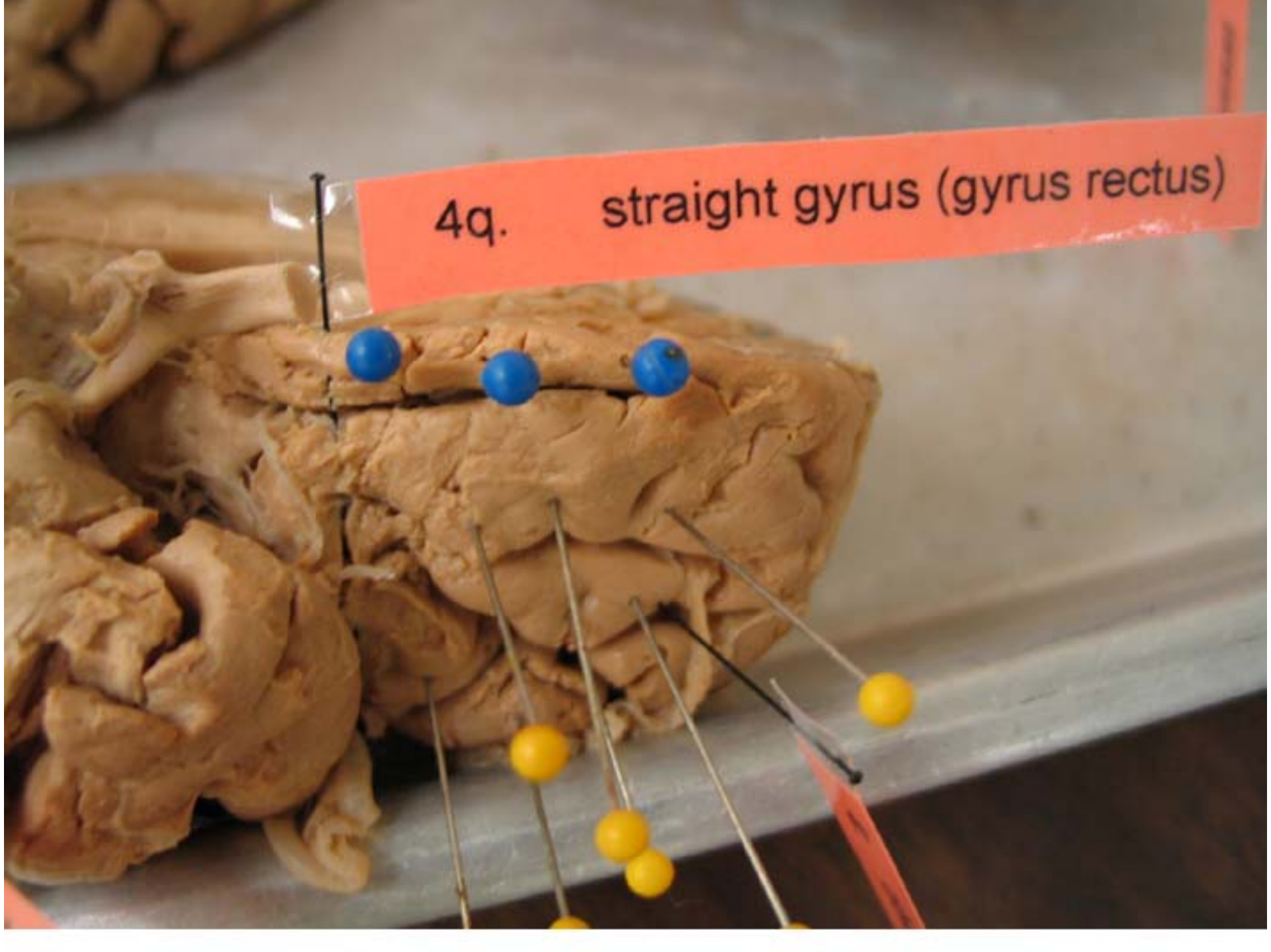
parahippocampal g.

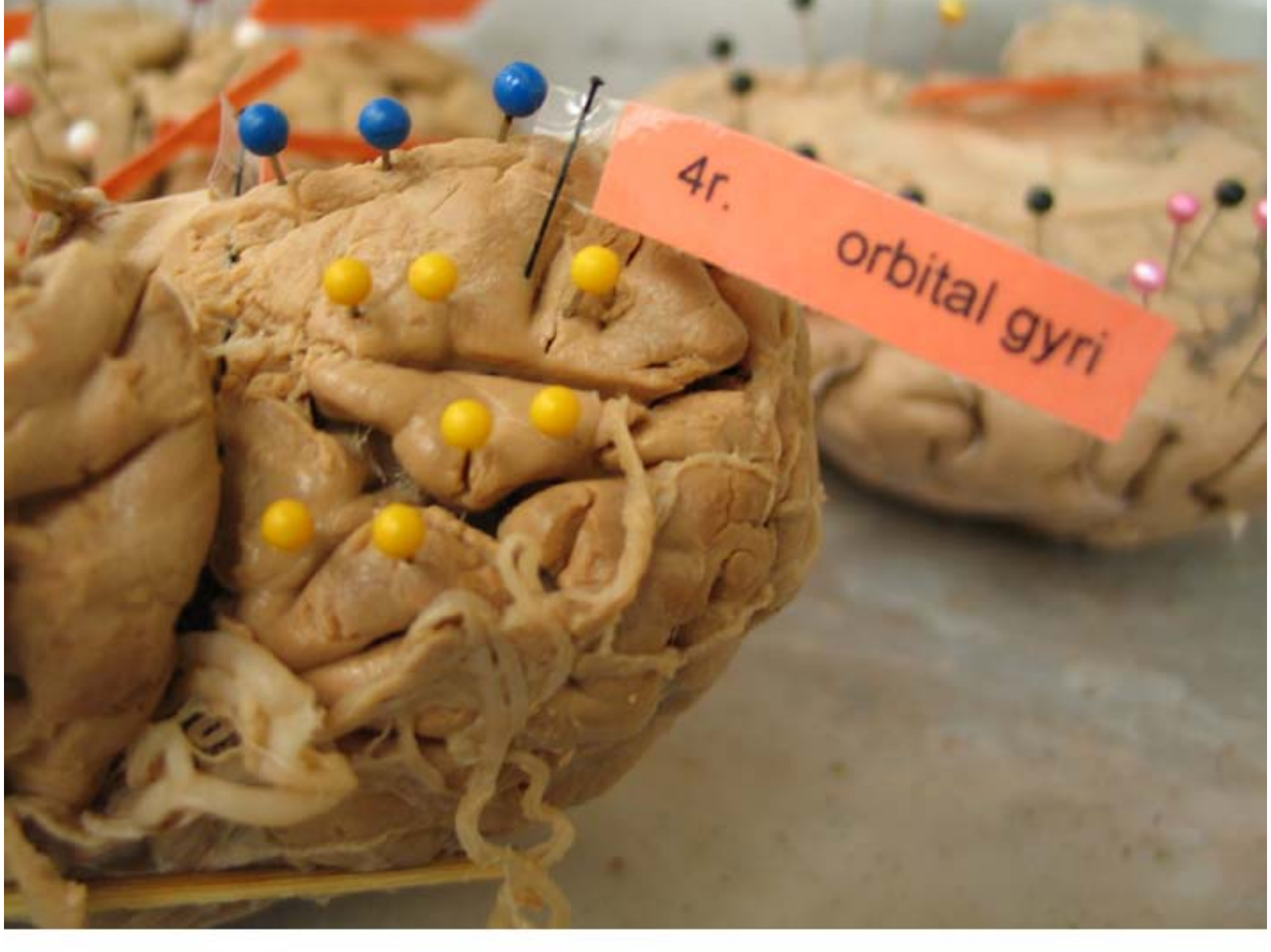


4p1. uncus



4q. straight gyrus (gyrus rectus)





4r.

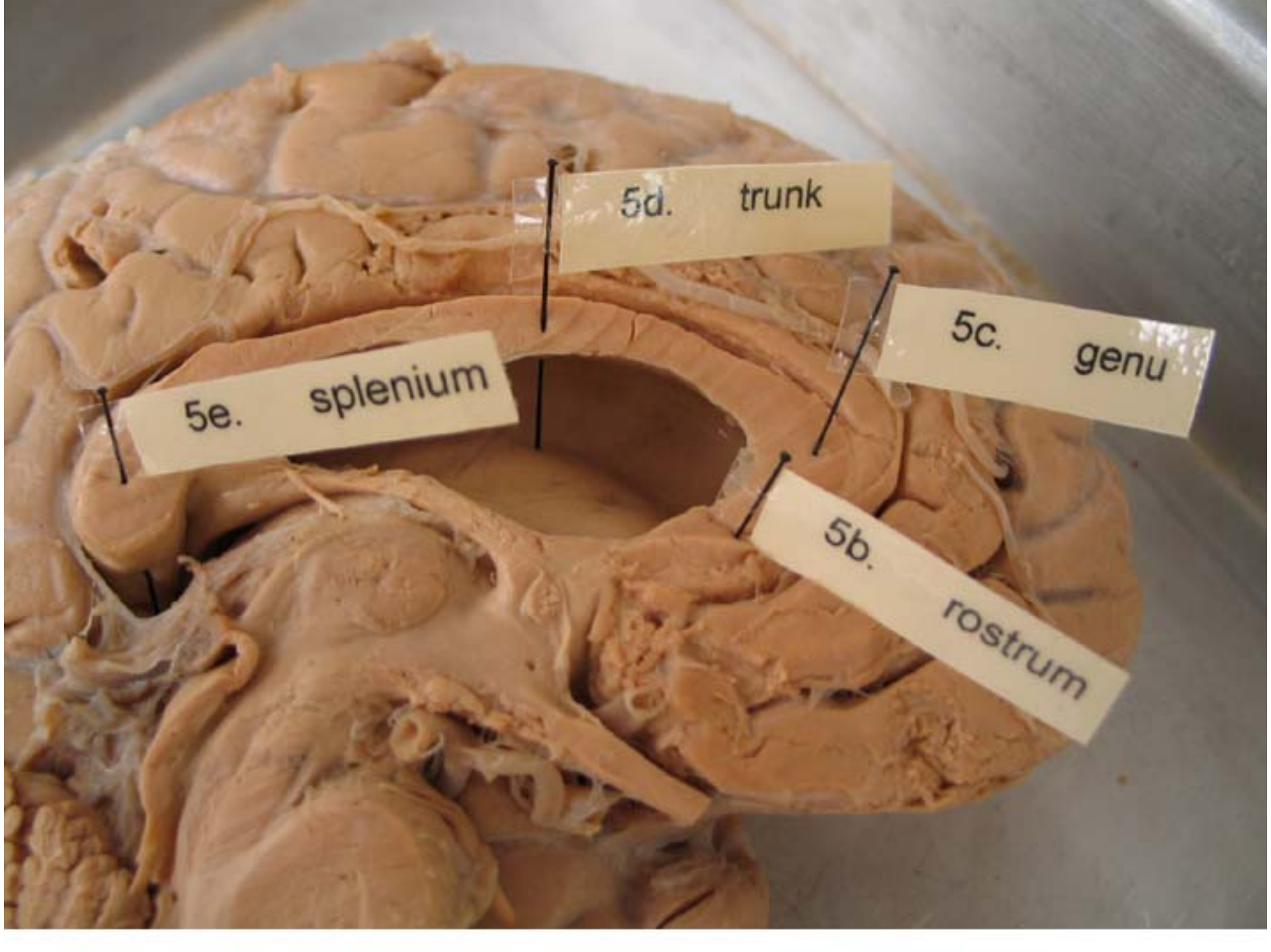
orbital gyri

5a. corpus callosum



5a. corpus callosum





5d. trunk

5c. genu

5e. splenium

5b. rostrum

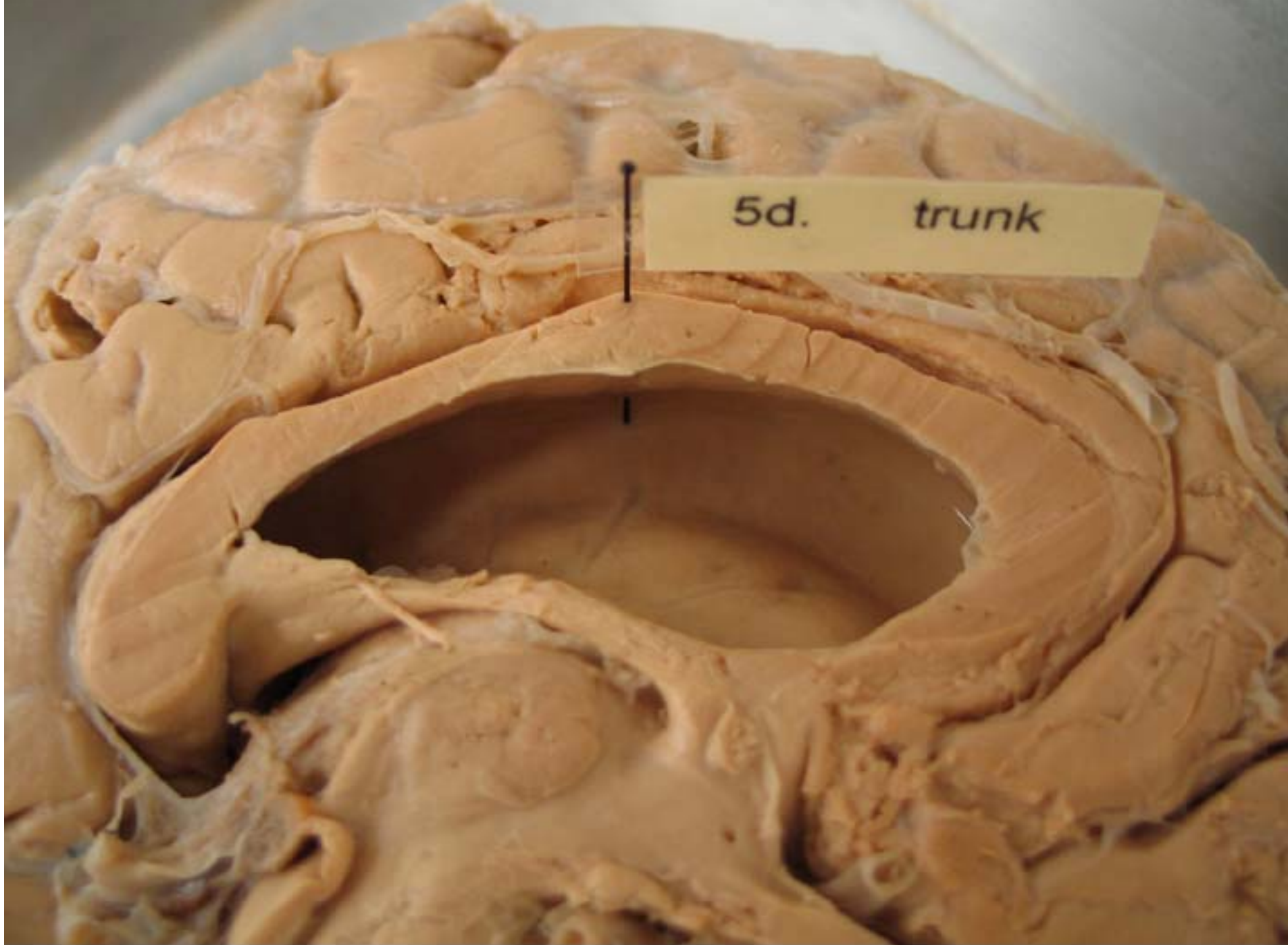


5b.

rostrum



5c. genu



5d.

trunk

5e. splenium



6a. frontal horn



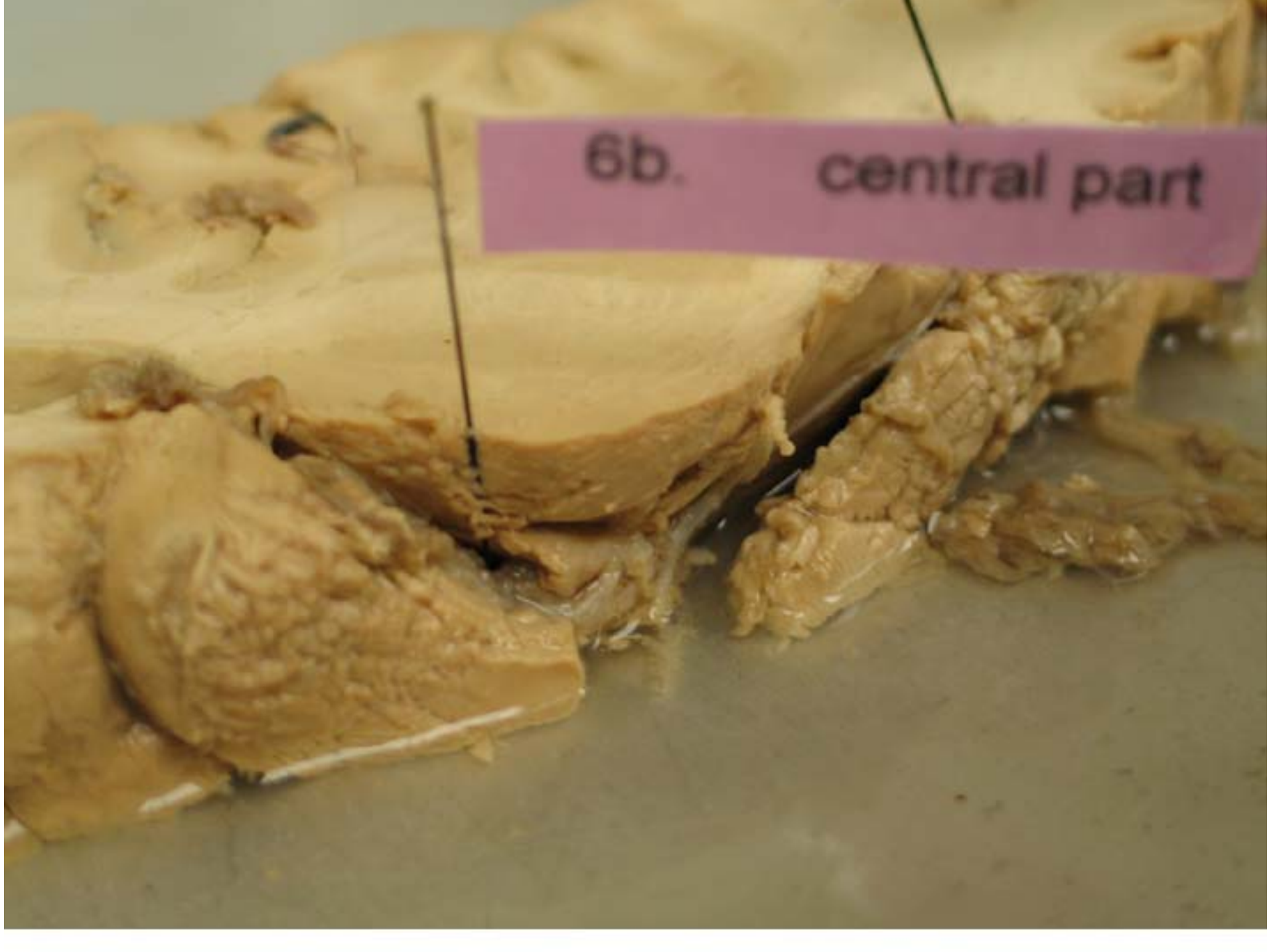
6a.

frontal horn



6b.

central part



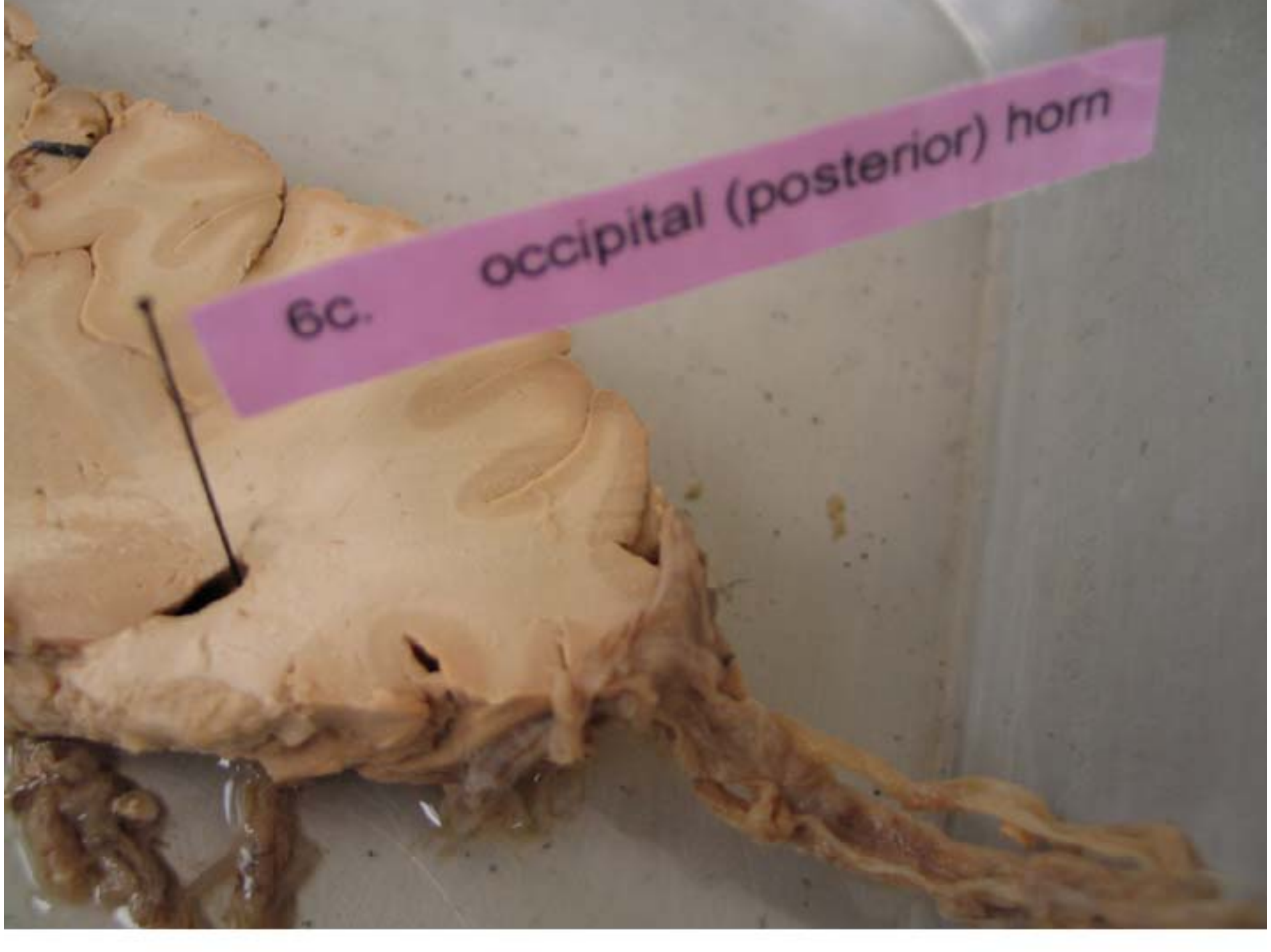


6b.

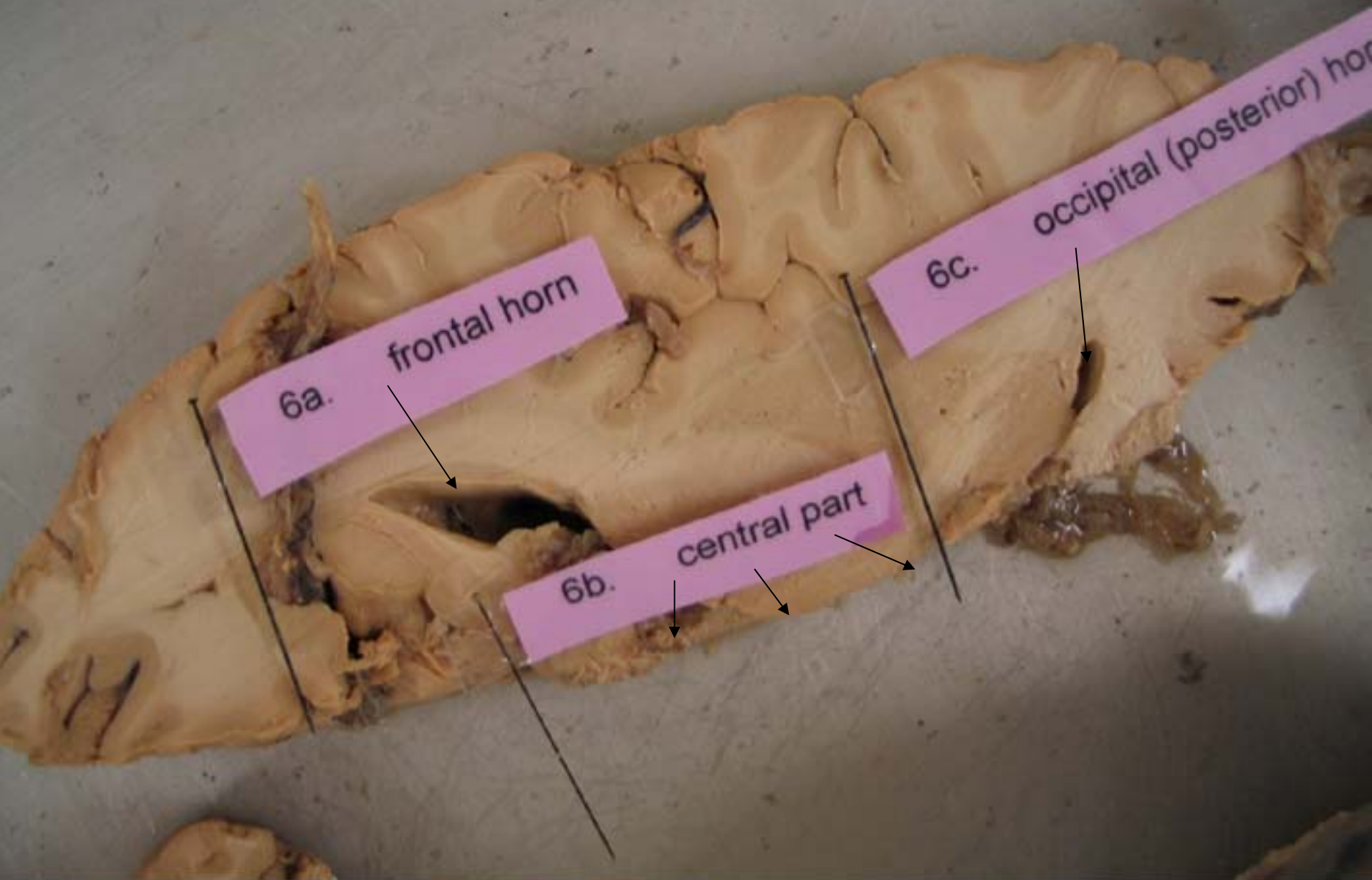
central part

6c.

occipital (posterior) horn



Lateral Ventricle



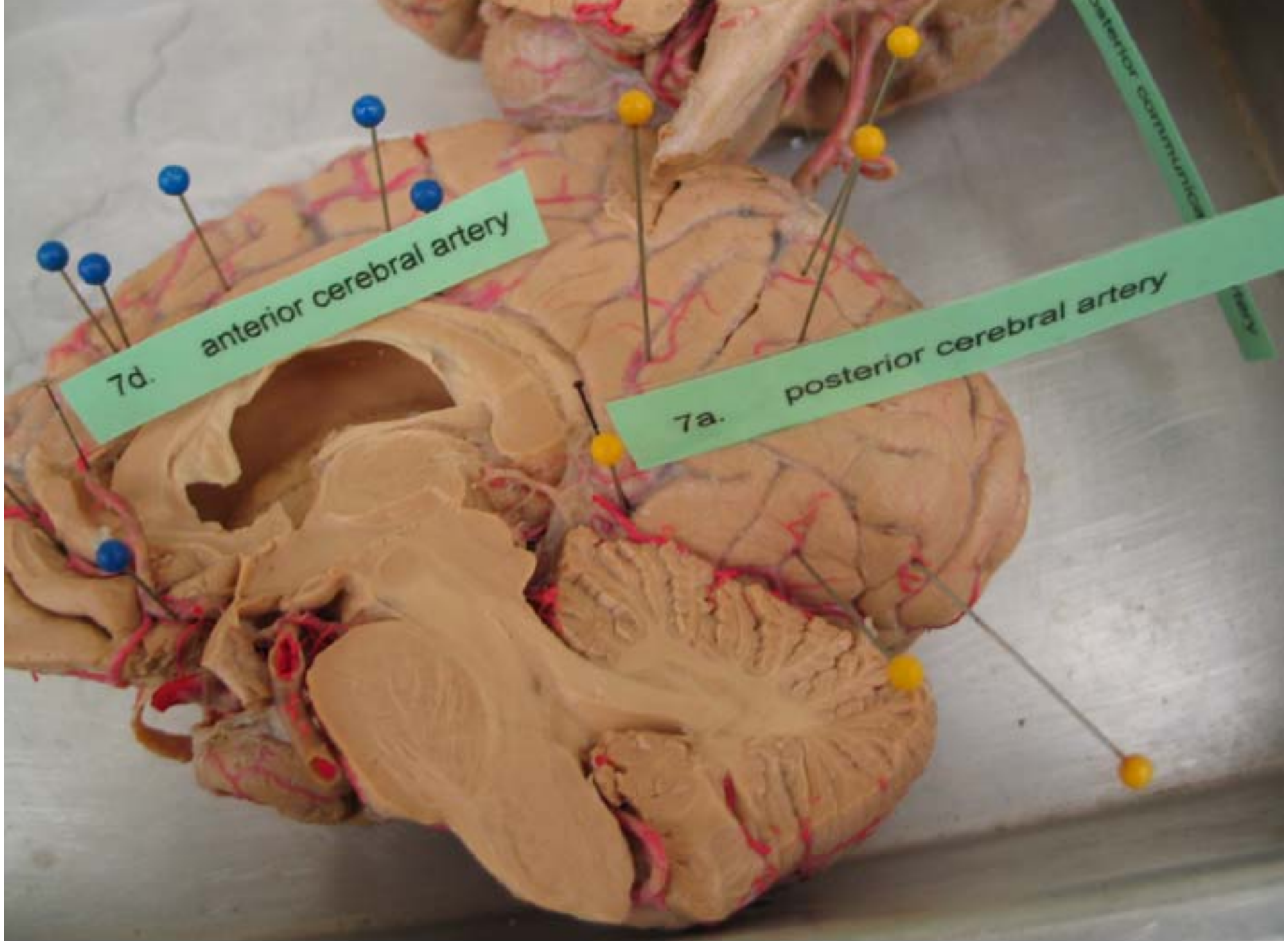


6d. temporal (inferior) horn

6d.

temporal (inferior)





7d. anterior cerebral artery

7a. posterior cerebral artery

anterior communicating artery



anterior cerebral artery

7a

posterior cerebral artery

posterior communicating artery

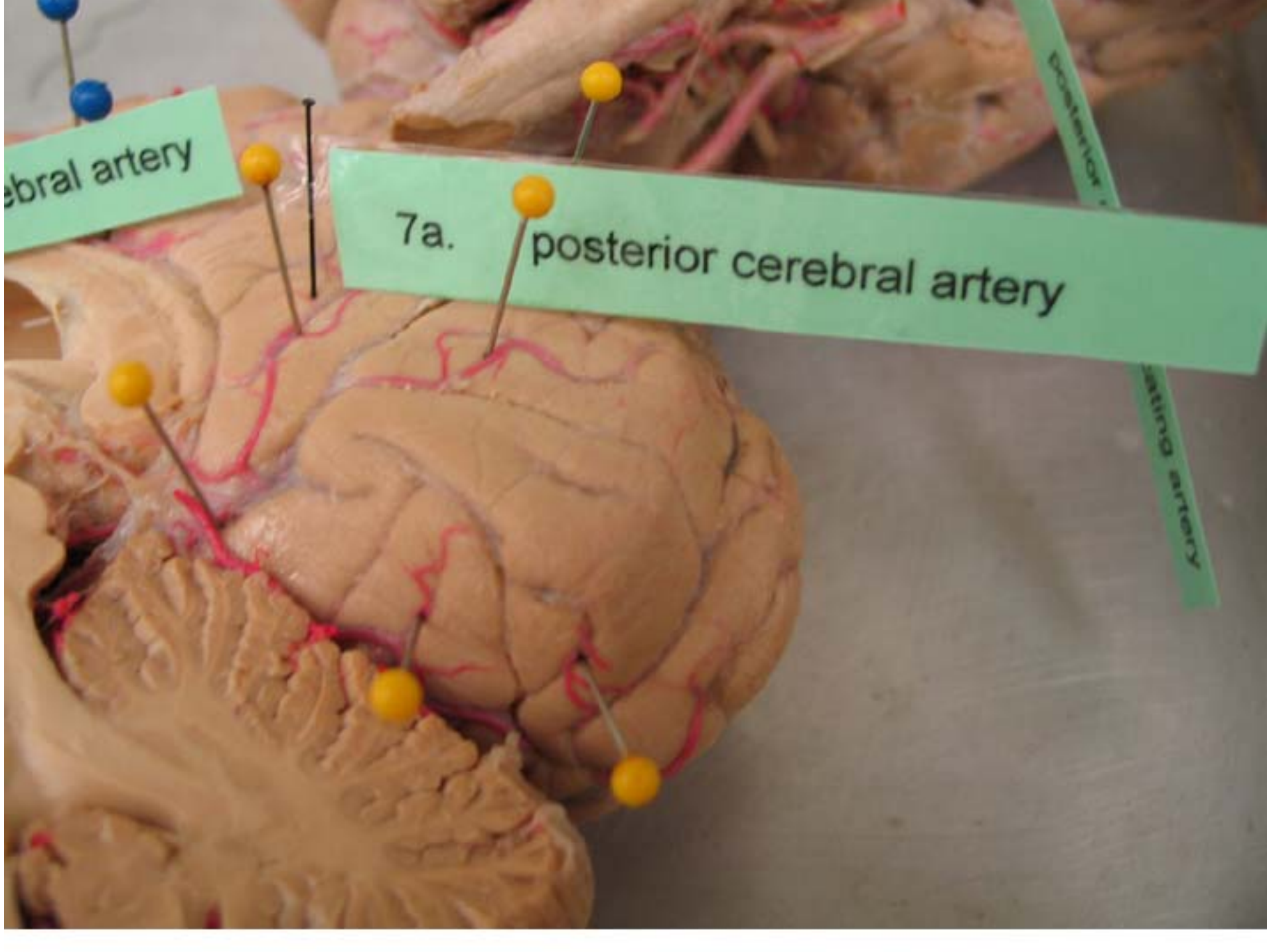
erebral artery

7a.

posterior cerebral artery

Posterior

Posterior artery

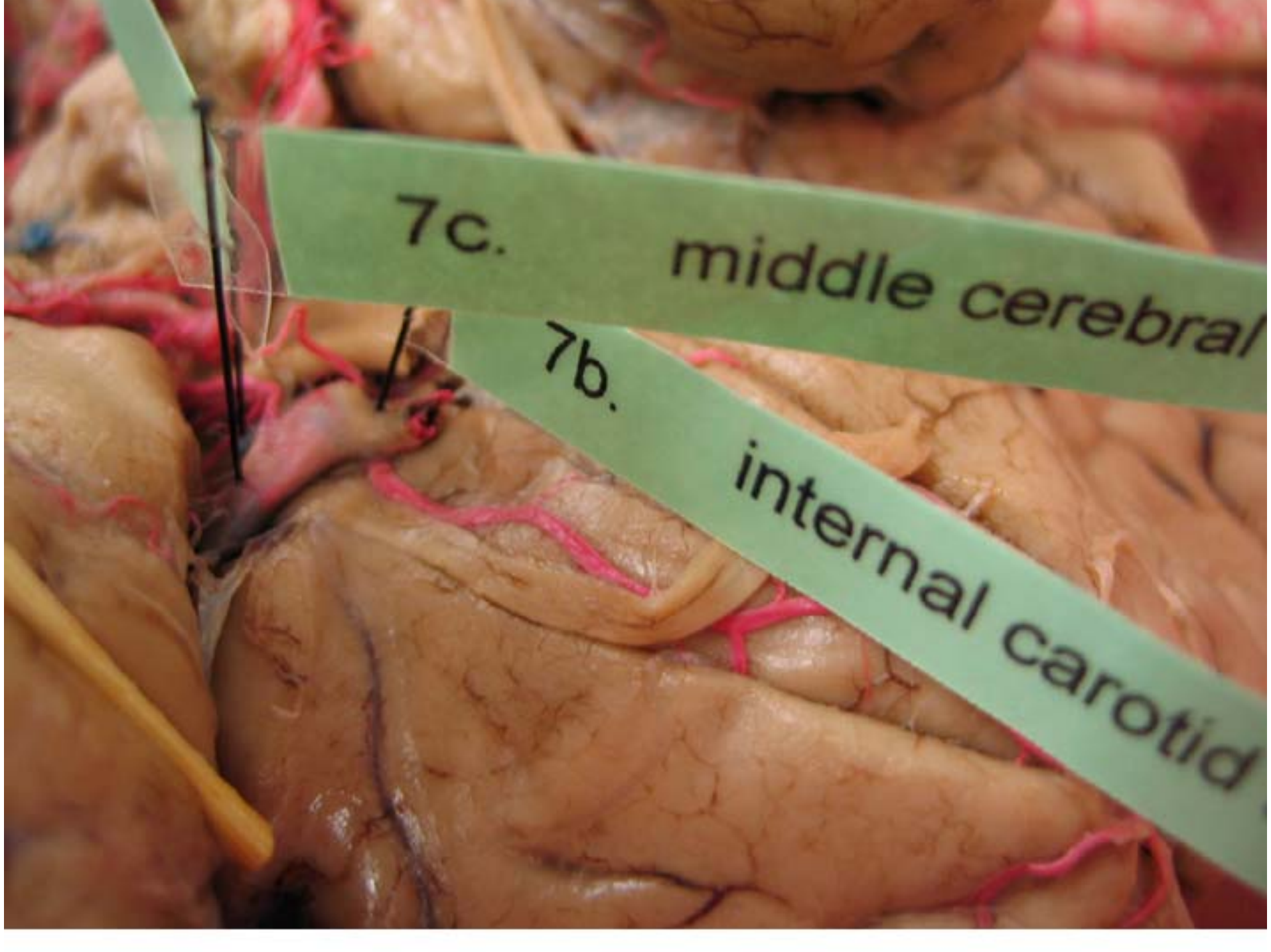


7c.

middle cerebral

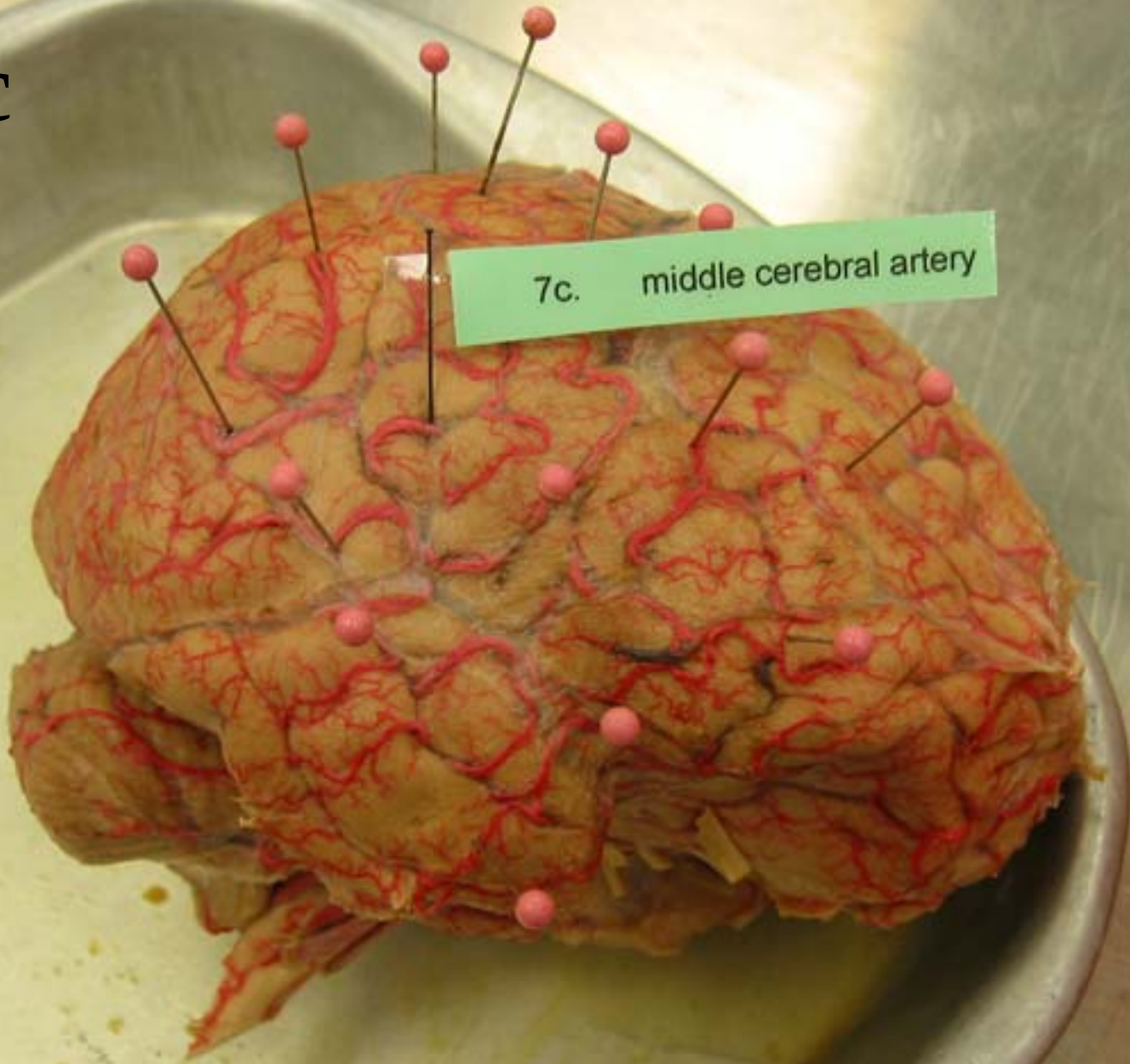
7b.

internal carotid



7c

7c. middle cerebral artery



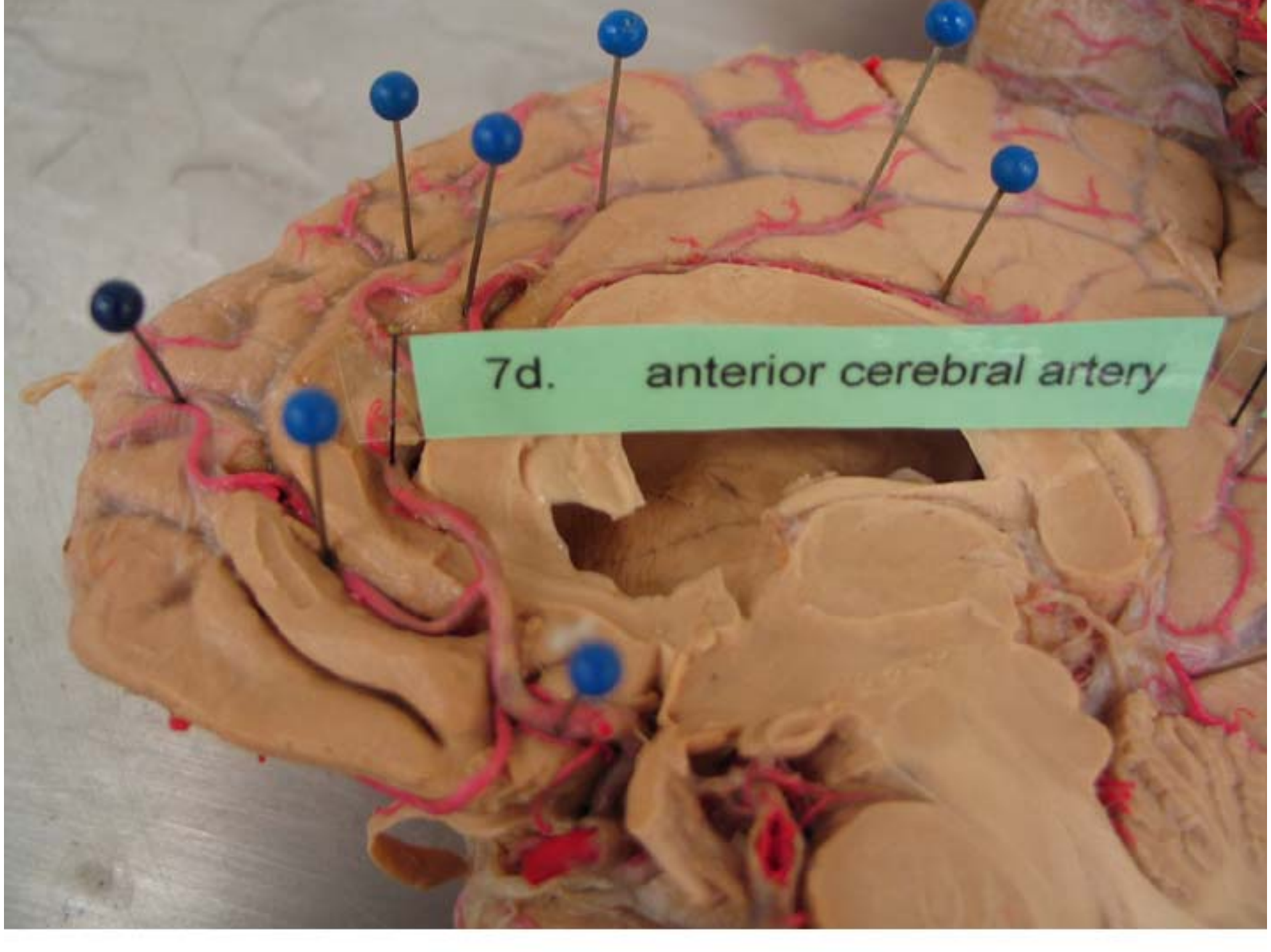
7c'



7c. middle cerebral artery

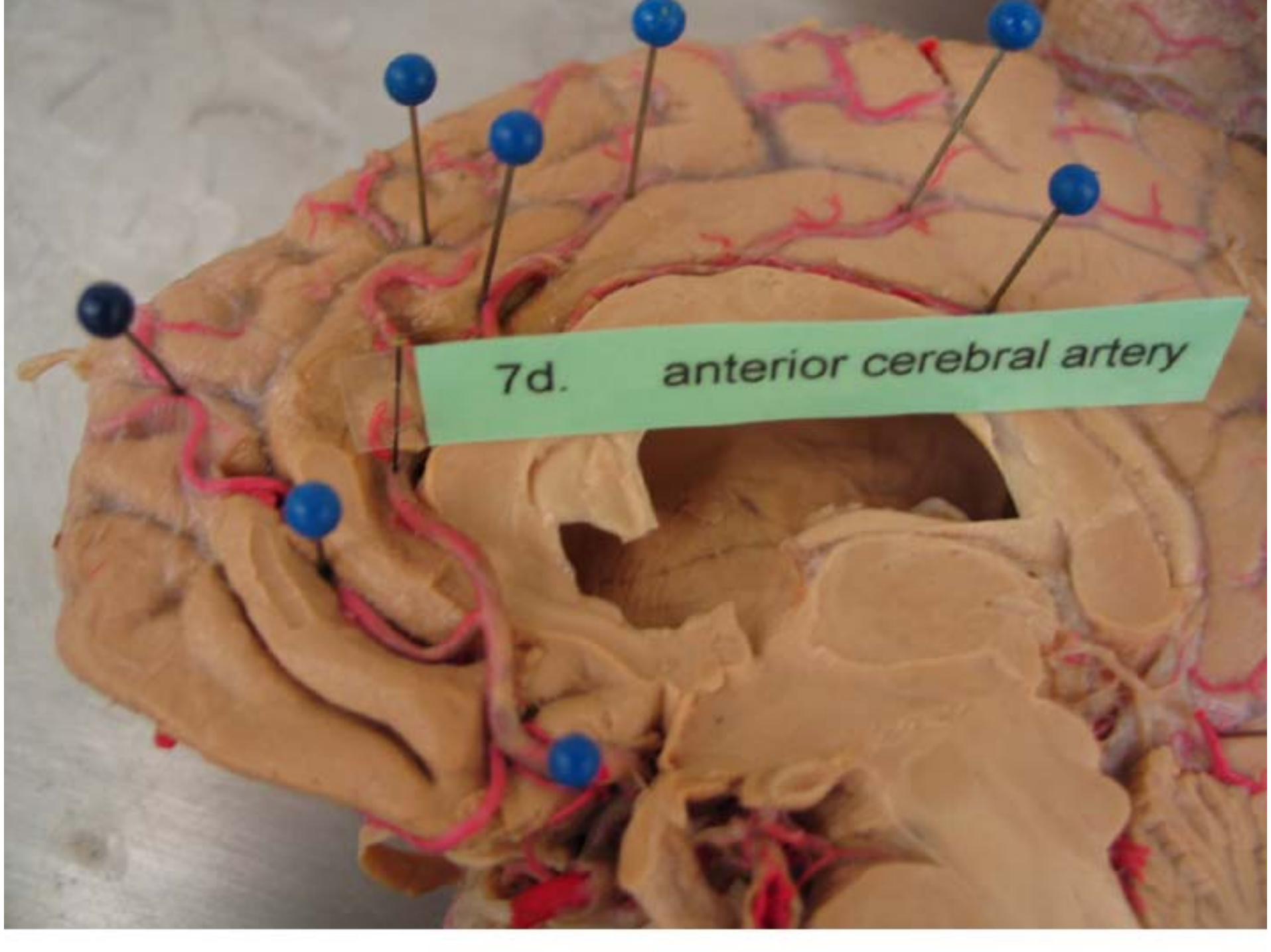
7c''





7d. anterior cerebral artery

This image shows a detailed anatomical model of the anterior cerebral artery (ACA) on a brain specimen. The artery is highlighted in red and is shown running along the superior surface of the brain, specifically over the corpus callosum. Several blue pins are used to hold the dissection open, revealing the underlying structures. A green label with the text '7d. anterior cerebral artery' is placed over the model for identification.



7d. anterior cerebral artery

This image shows a detailed anatomical model of the human brain, viewed from a superior perspective. The brain's surface is covered in gyri and sulci. A network of blood vessels is visible, with the anterior cerebral artery (ACA) specifically highlighted in red. The ACA is shown originating from the anterior division of the internal carotid artery and running along the superior margin of the corpus callosum. Several blue pins are used to hold open the dissection, revealing the underlying structures. A green label with the text '7d. anterior cerebral artery' is placed over the model to identify the highlighted vessel.

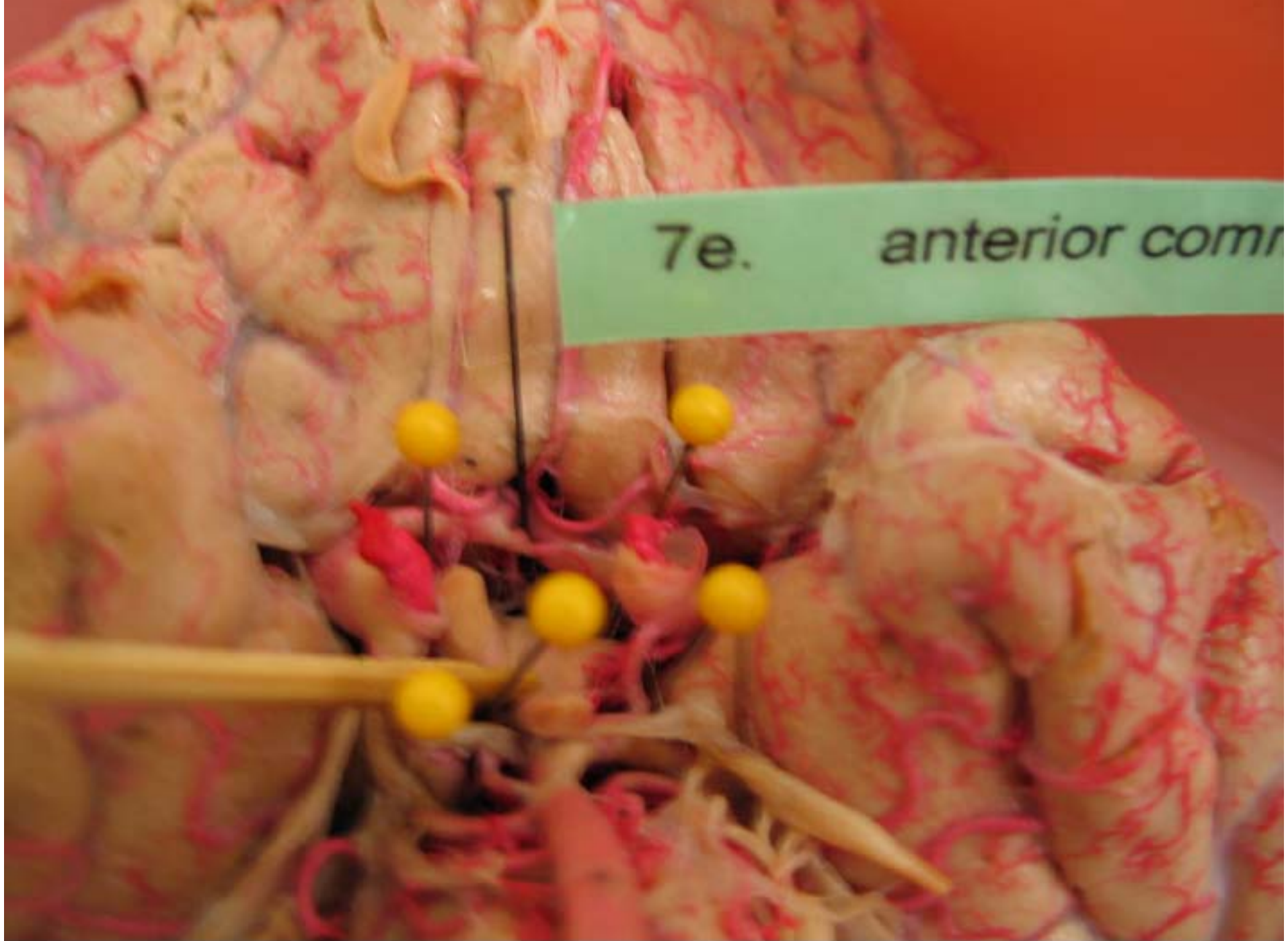
7e.

anterior commun



7e.

anterior comm





7f.

poste

7f.

posterior communicating an



7h.

Circle of Willis

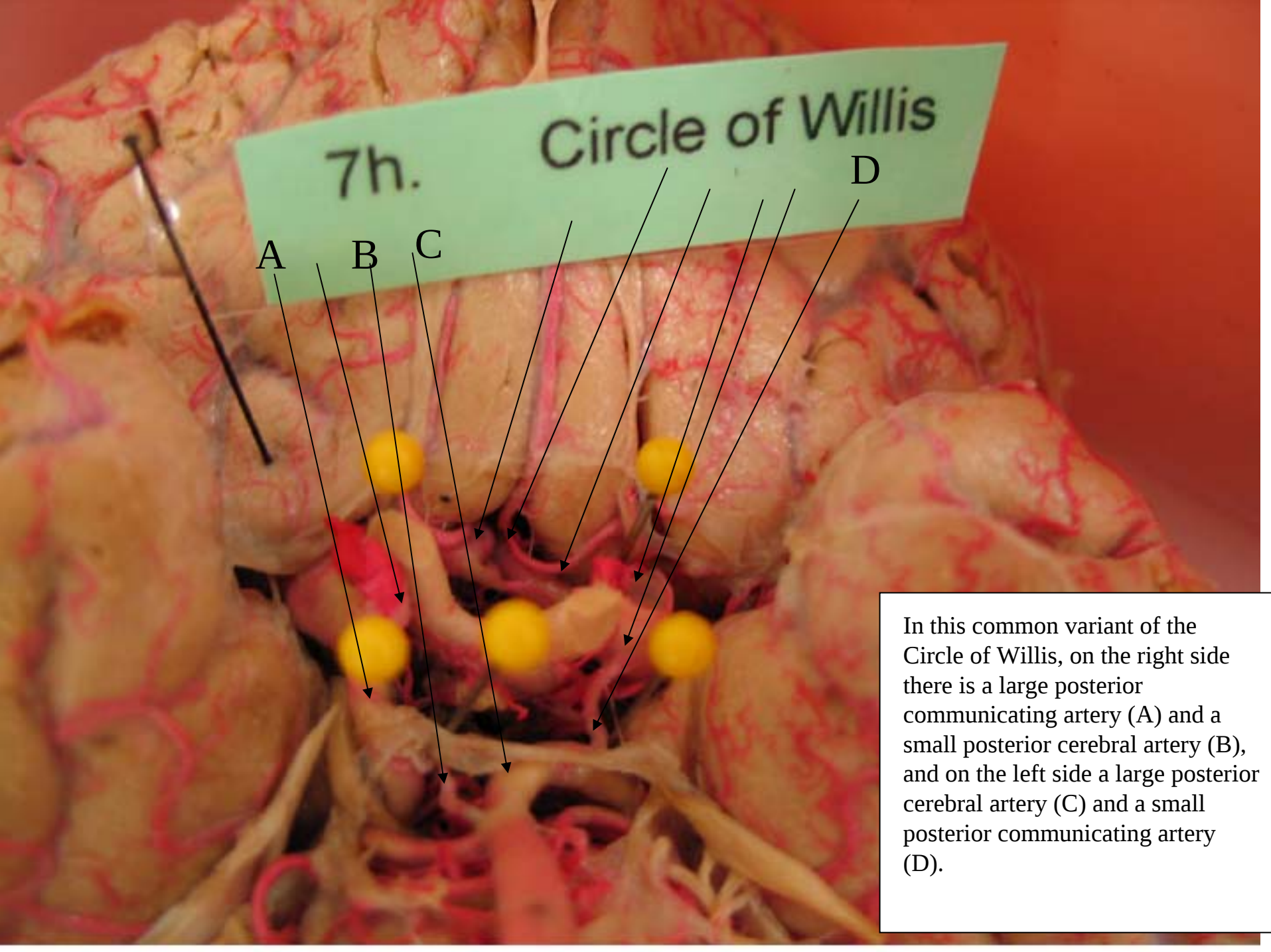
A

B

C

D

In this common variant of the Circle of Willis, on the right side there is a large posterior communicating artery (A) and a small posterior cerebral artery (B), and on the left side a large posterior cerebral artery (C) and a small posterior communicating artery (D).



7h.

Circle of Willis





, body,

9a.

caudate nucleus

(head

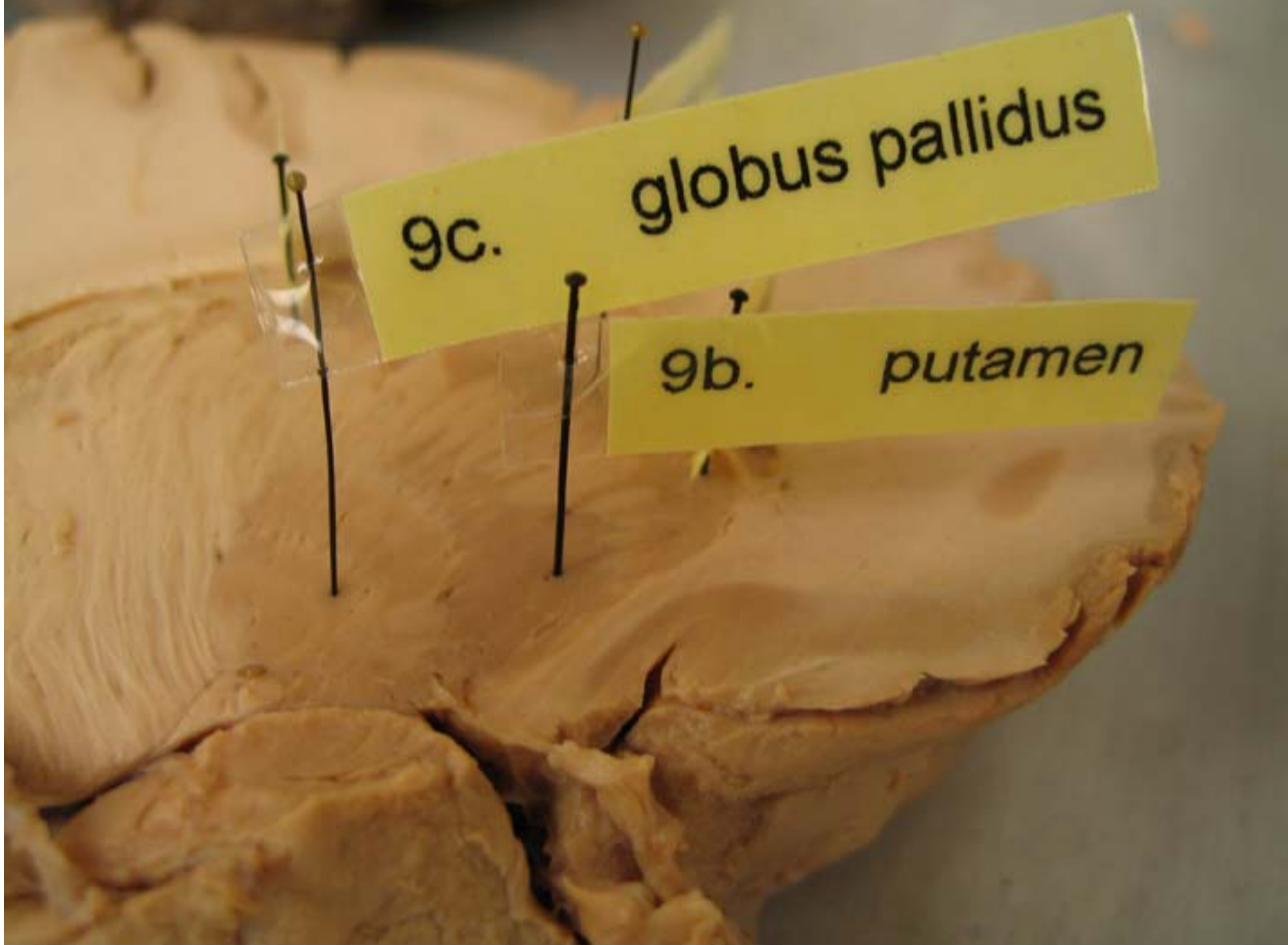
tail)

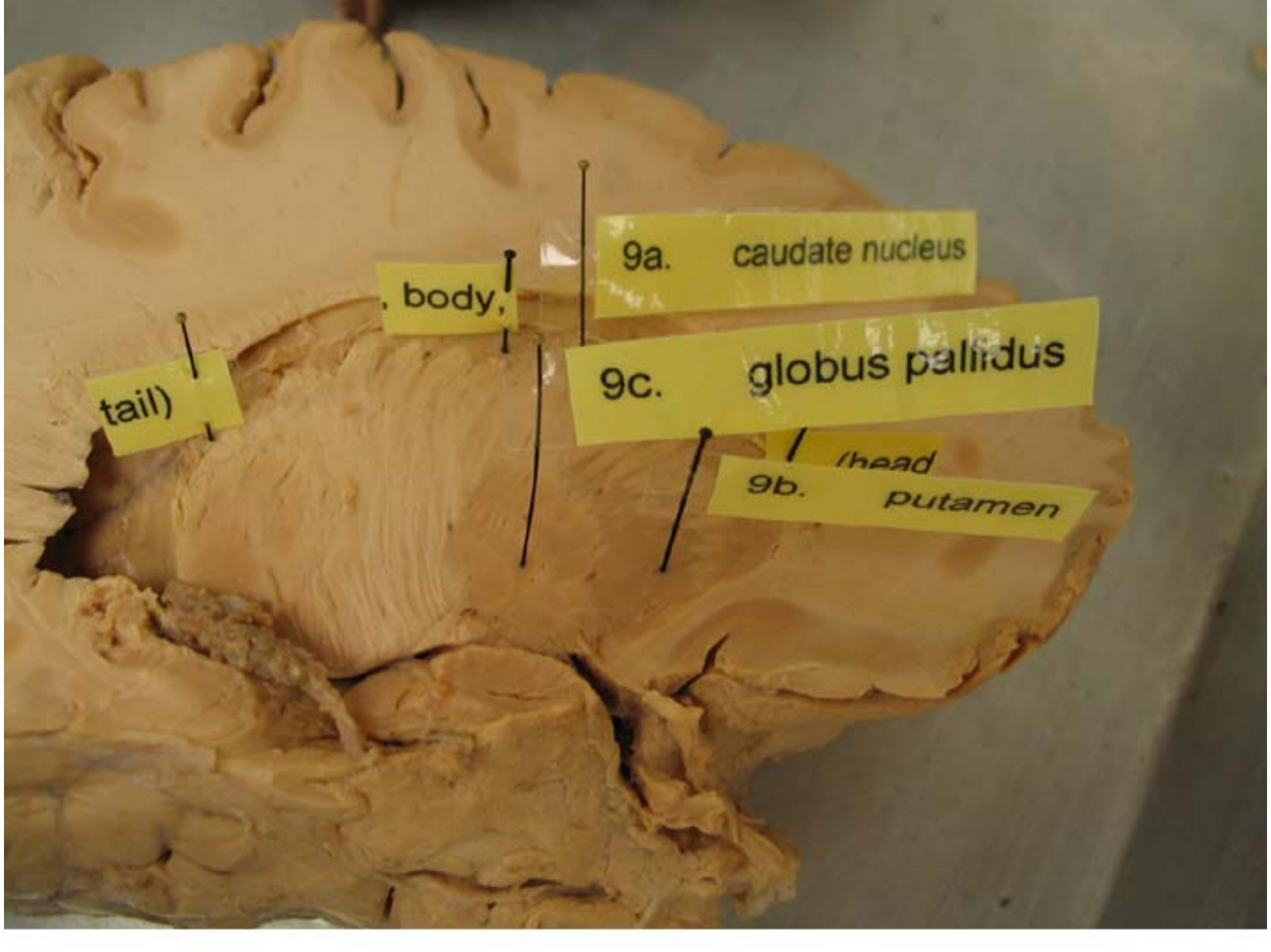
9c.

globus pallidus

9b.

putamen





9a. caudate nucleus

, body,

9c. globus pallidus

tail)

9b. putamen

head



9d.

anterior limb of internal capsule

10e.

septal nuclei

9e.

genu of internal capsule

9g.

corpus callosum



9d.

10e. septal nuclei

9e. genu of internal capsule

posterior limb of internal capsule

10c. hippocampus

9d.

anterior limb of internal capsule

9e.

genu of internal capsule

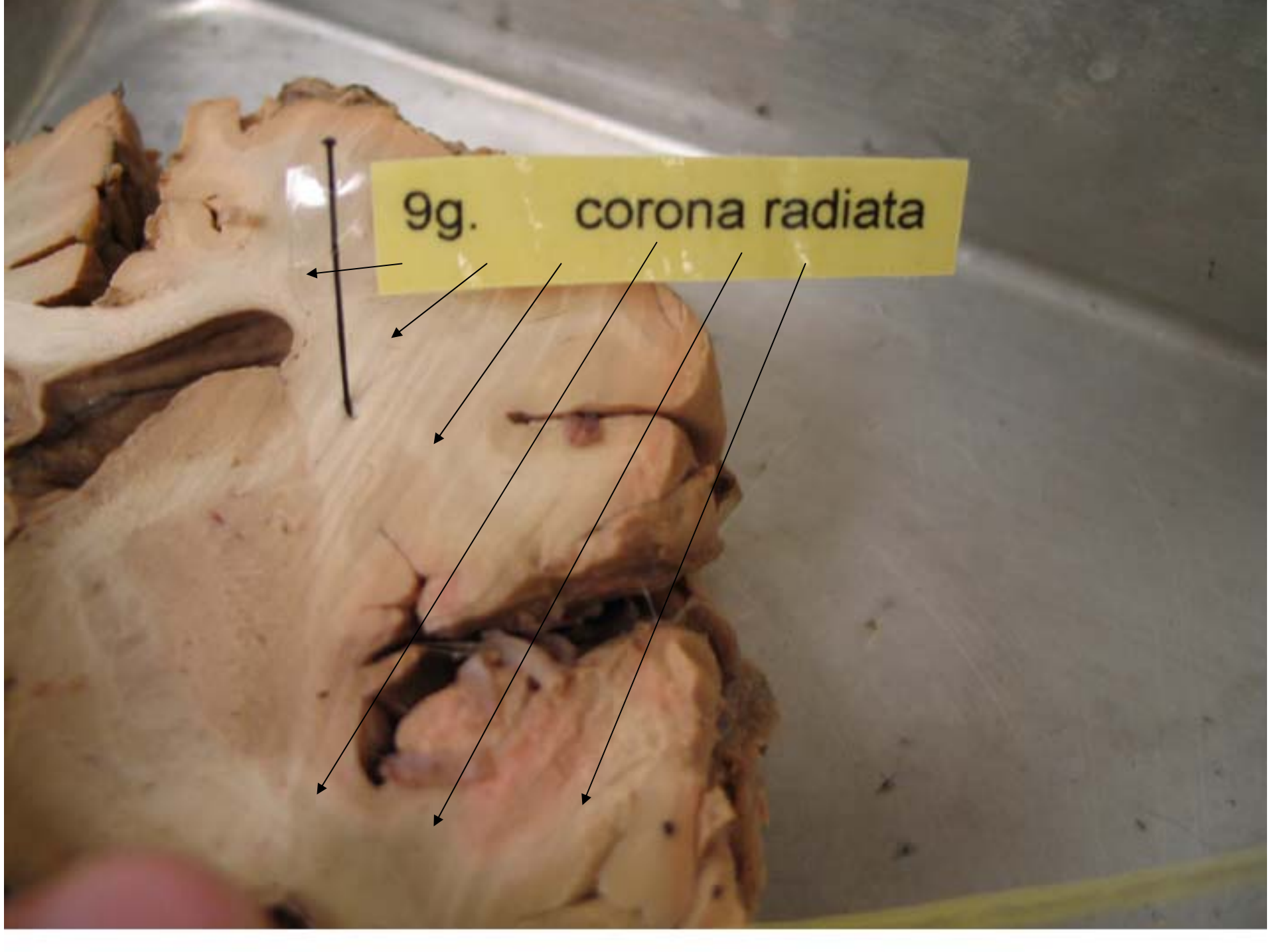
9f.

posterior limb of internal capsule

zona radiata

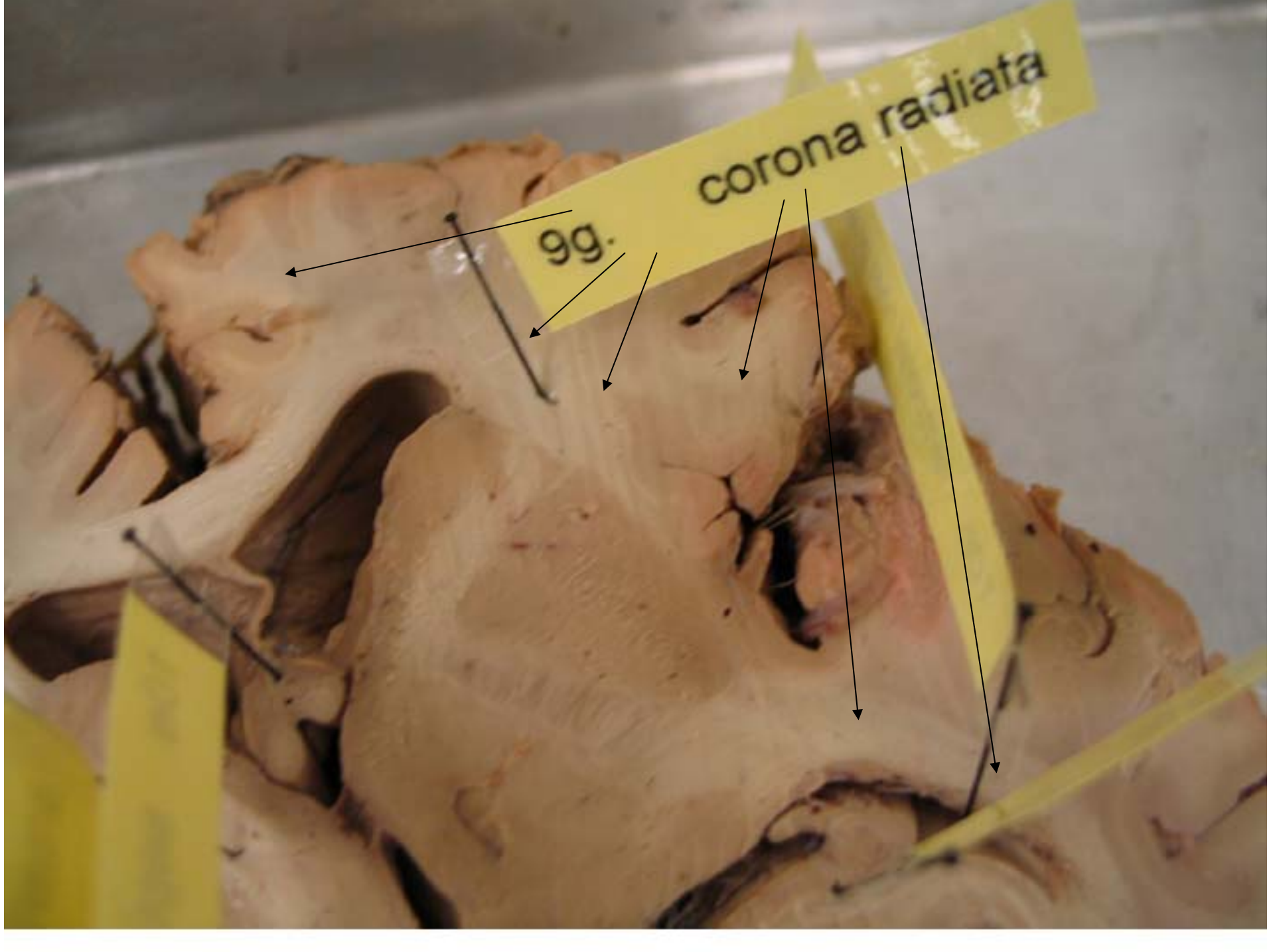
9g.

corona radiata



corona radiata

99.



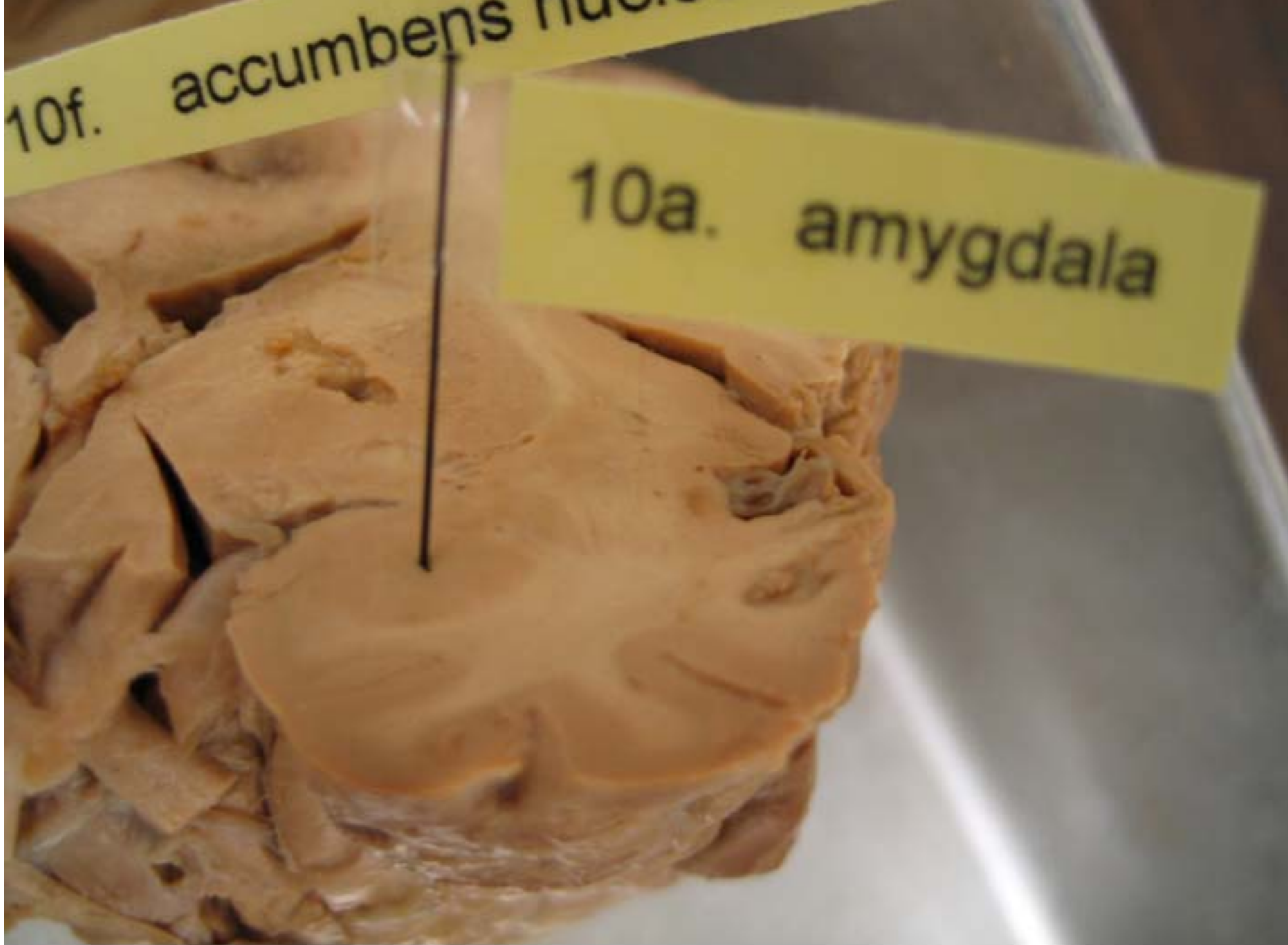
10f. accumbens nucleus

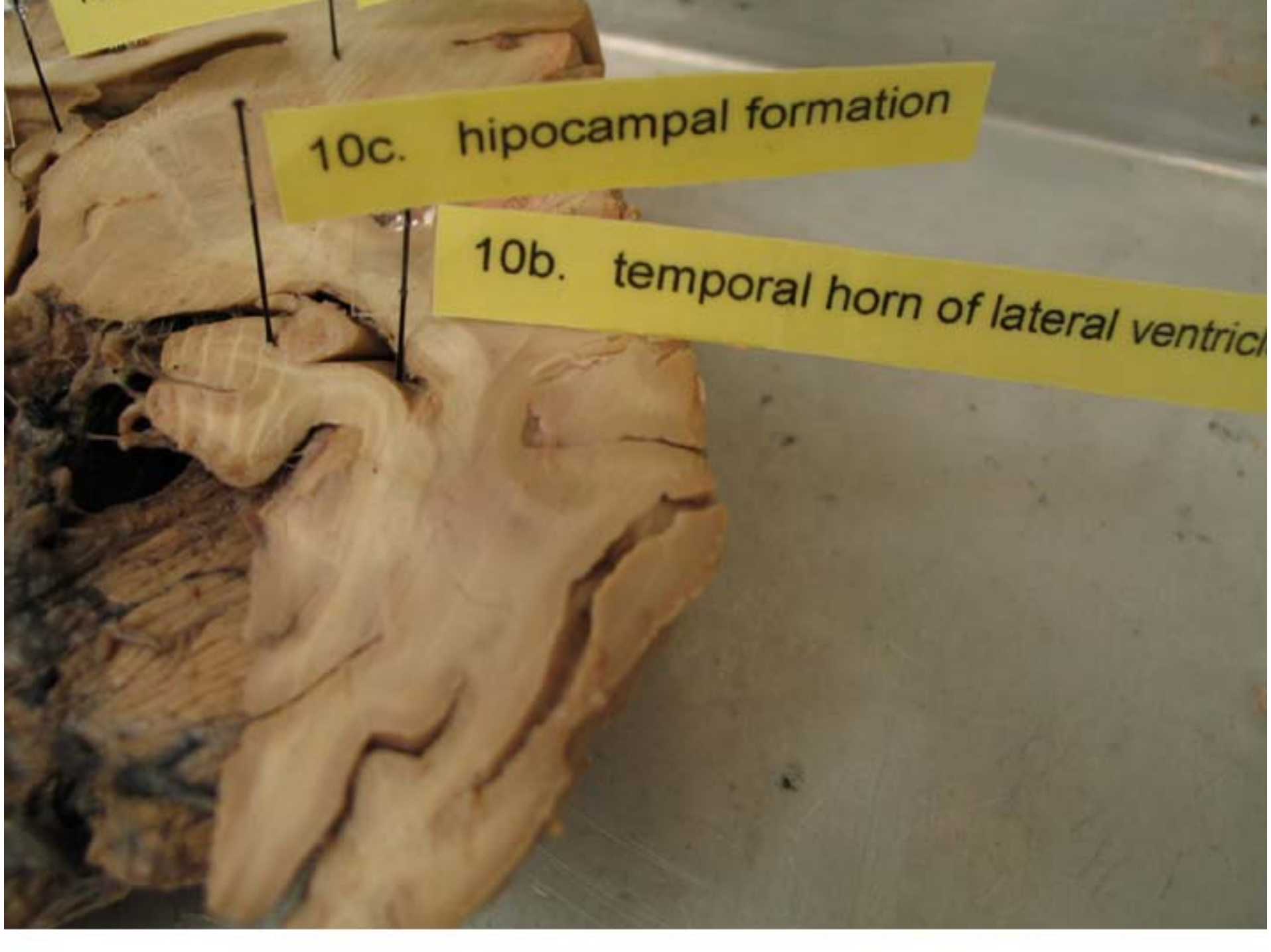
10a. amygdala



10f. accumbens nucleus

10a. amygdala





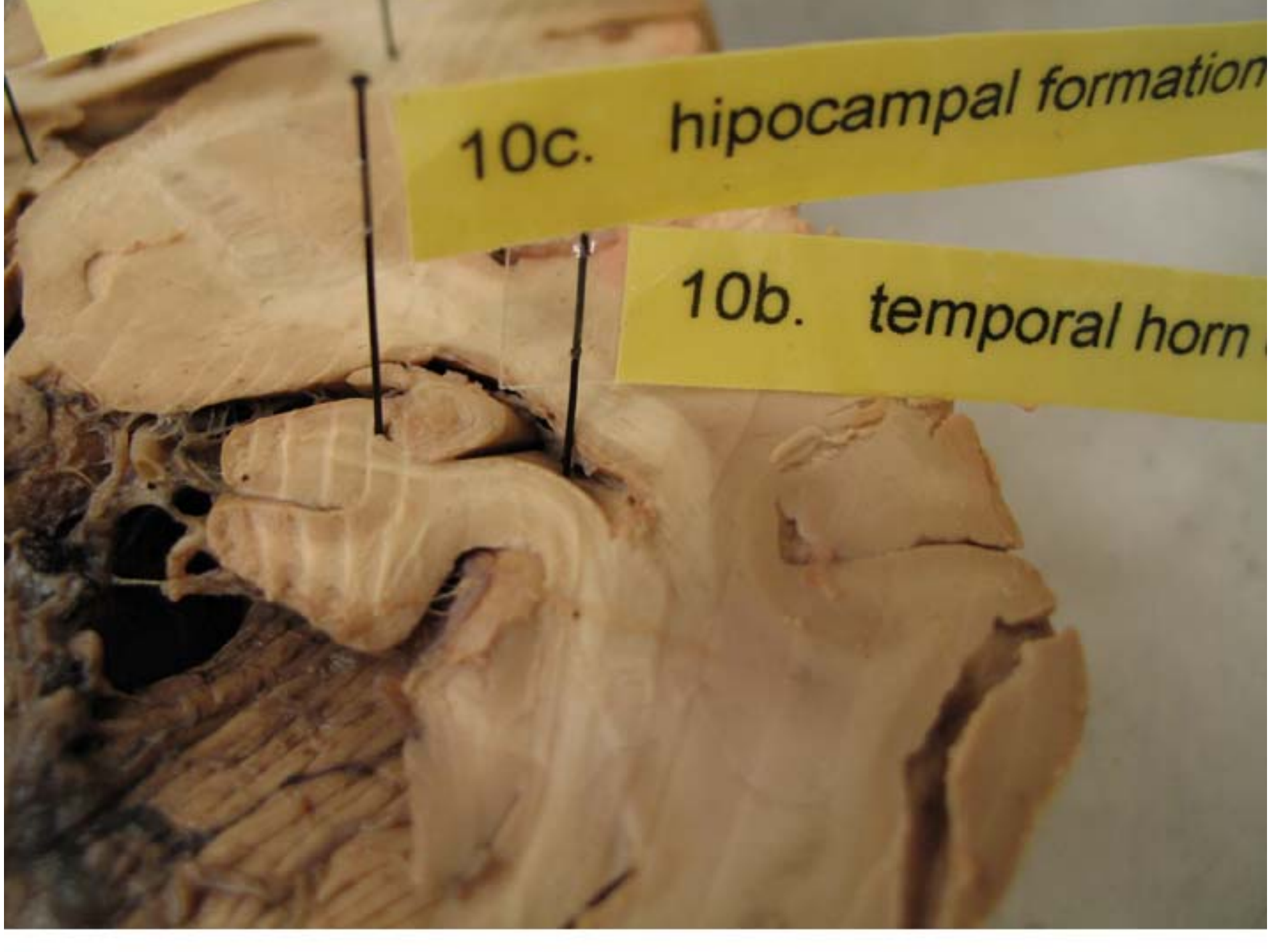
10c. hippocampal formation

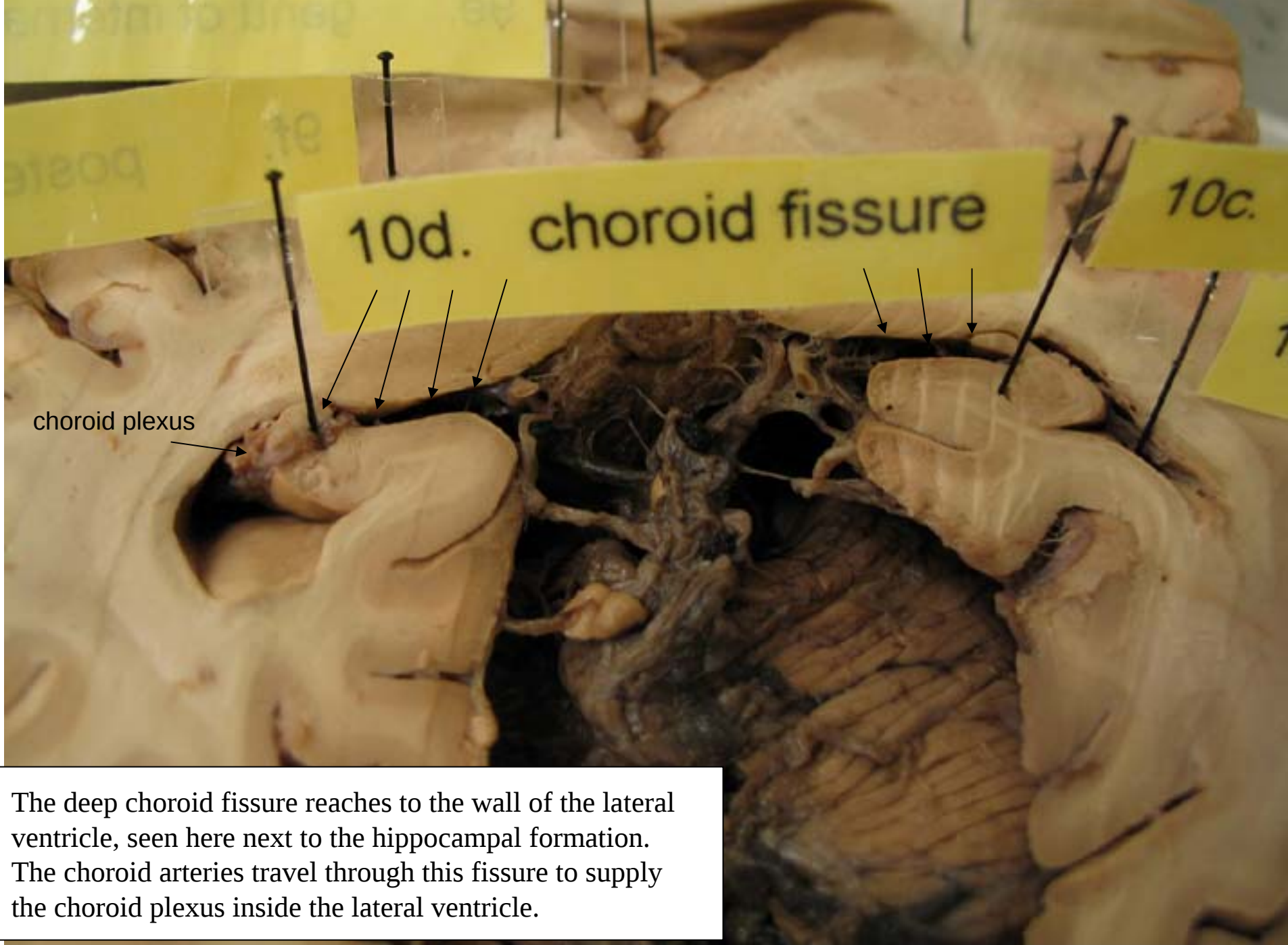
This image shows a coronal section of a brain specimen. The hippocampal formation is visible as a curved, pale structure. The temporal horn of the lateral ventricle is also visible, extending from the main body of the lateral ventricle. The surrounding brain tissue is light-colored and shows some dissection lines.

10b. temporal horn of lateral ventricle

10c. hippocampal formation

10b. temporal horn





10d. choroid fissure

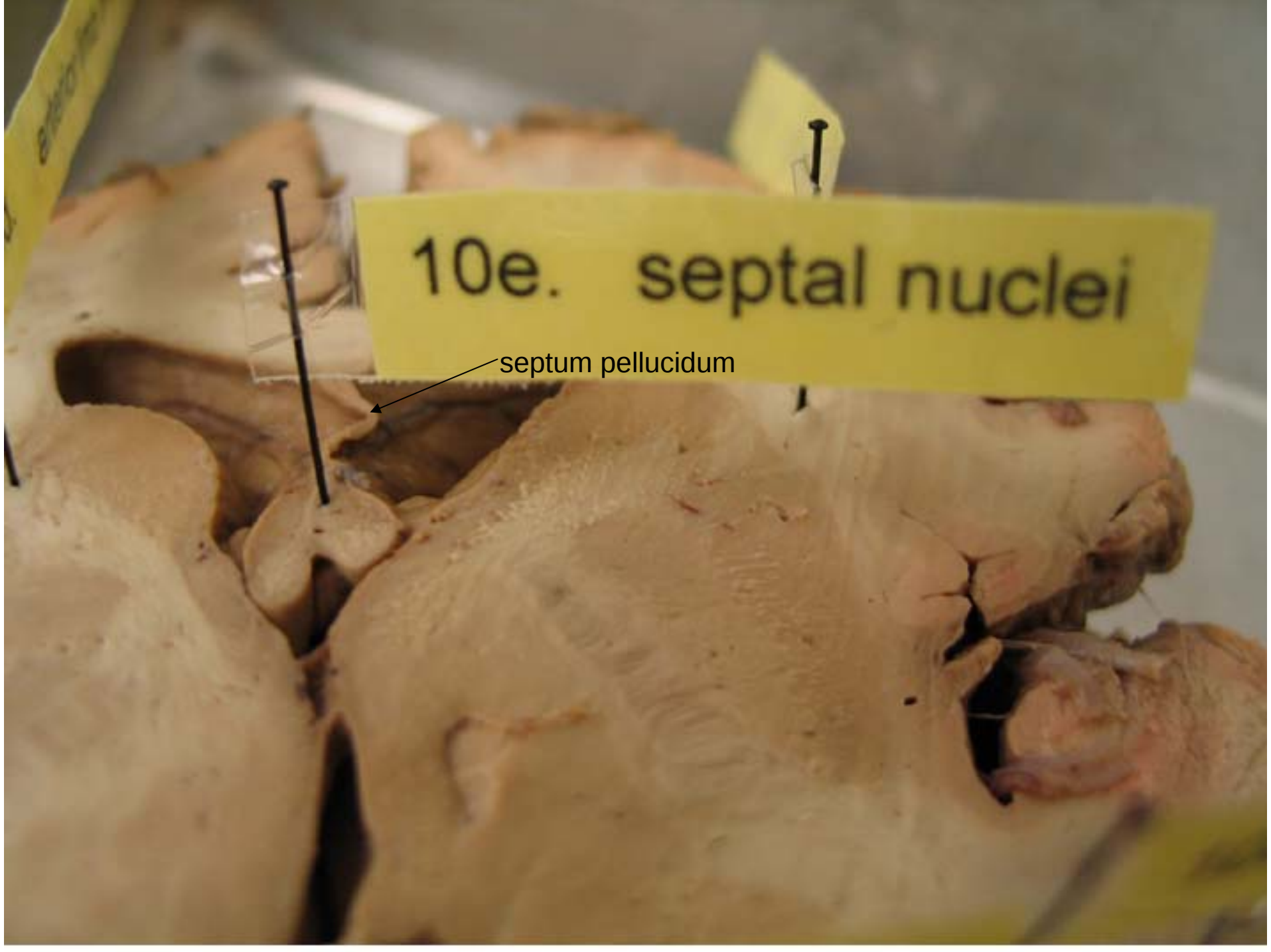
10c.

choroid plexus

The deep choroid fissure reaches to the wall of the lateral ventricle, seen here next to the hippocampal formation. The choroid arteries travel through this fissure to supply the choroid plexus inside the lateral ventricle.

10e. septal nuclei

septum pellucidum



The complete name of the nucleus is Nucleus Accumbens Septi, meaning leaning up against the septal nuclei. It is continuous with the caudate nucleus and the putamen, and they all together make up the Corpus Striatum.

