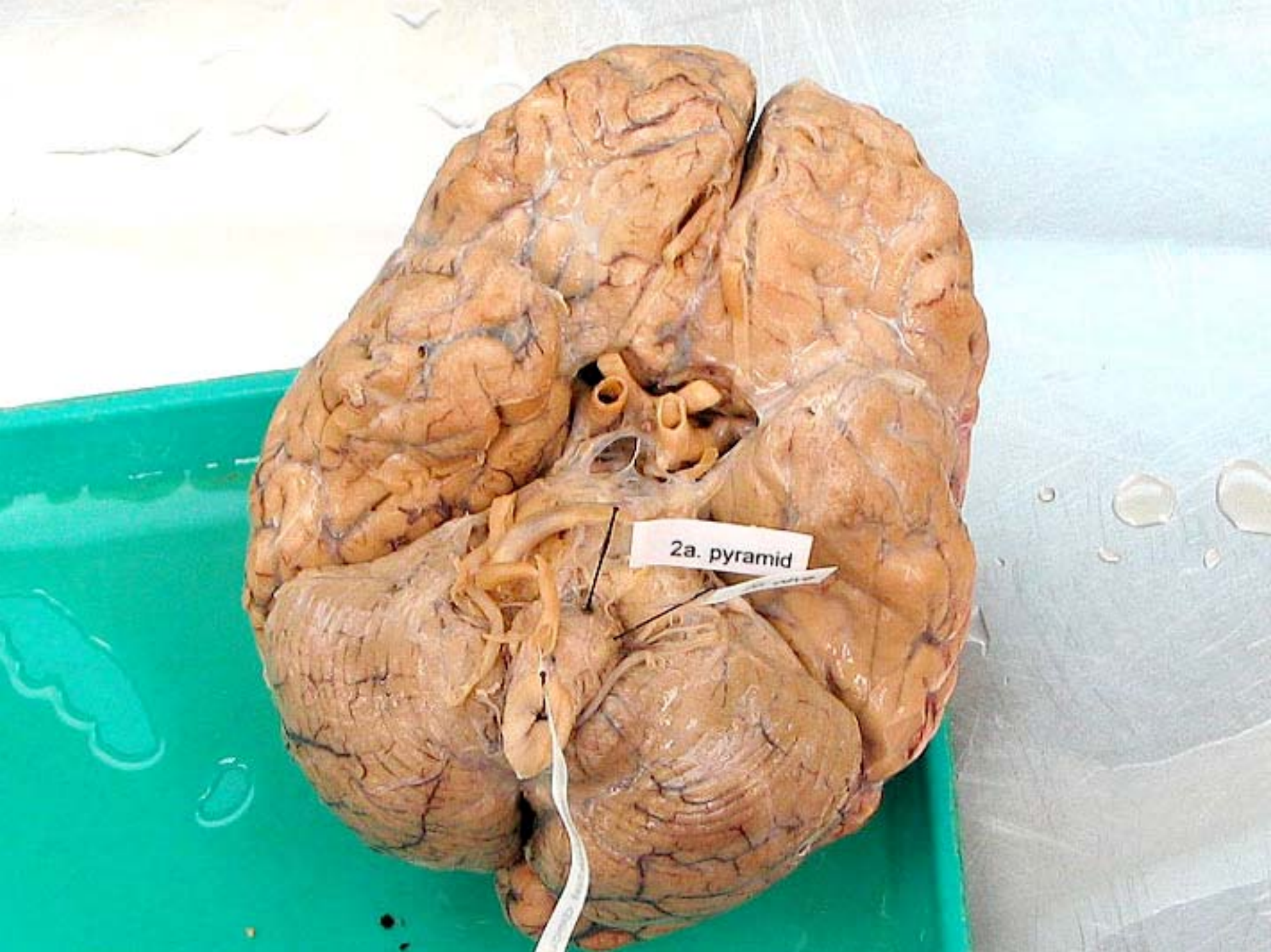


NOP-ANTR-RAD 552

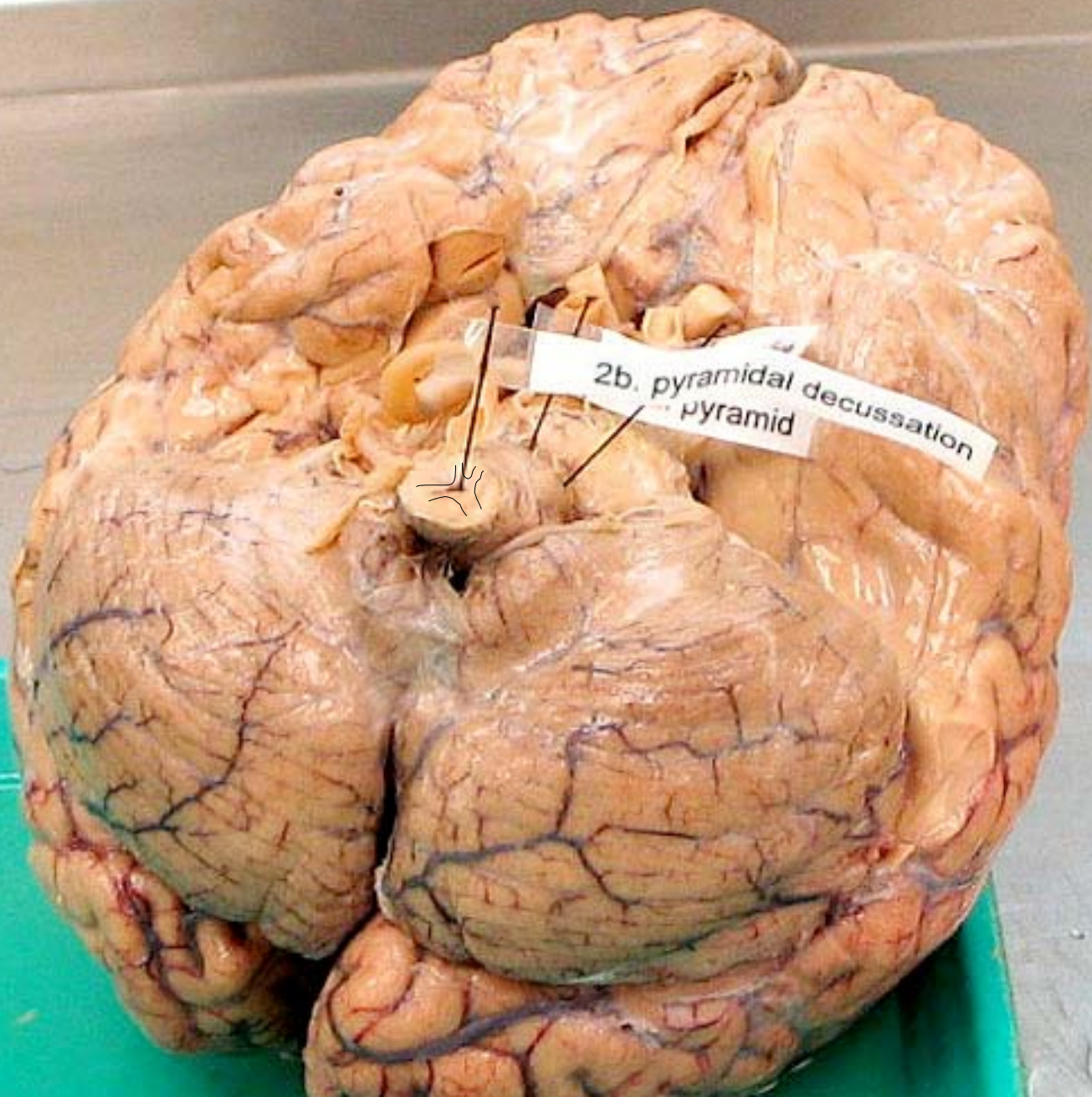
Medical Neuroscience – Spring 2004

Laboratory Objectives

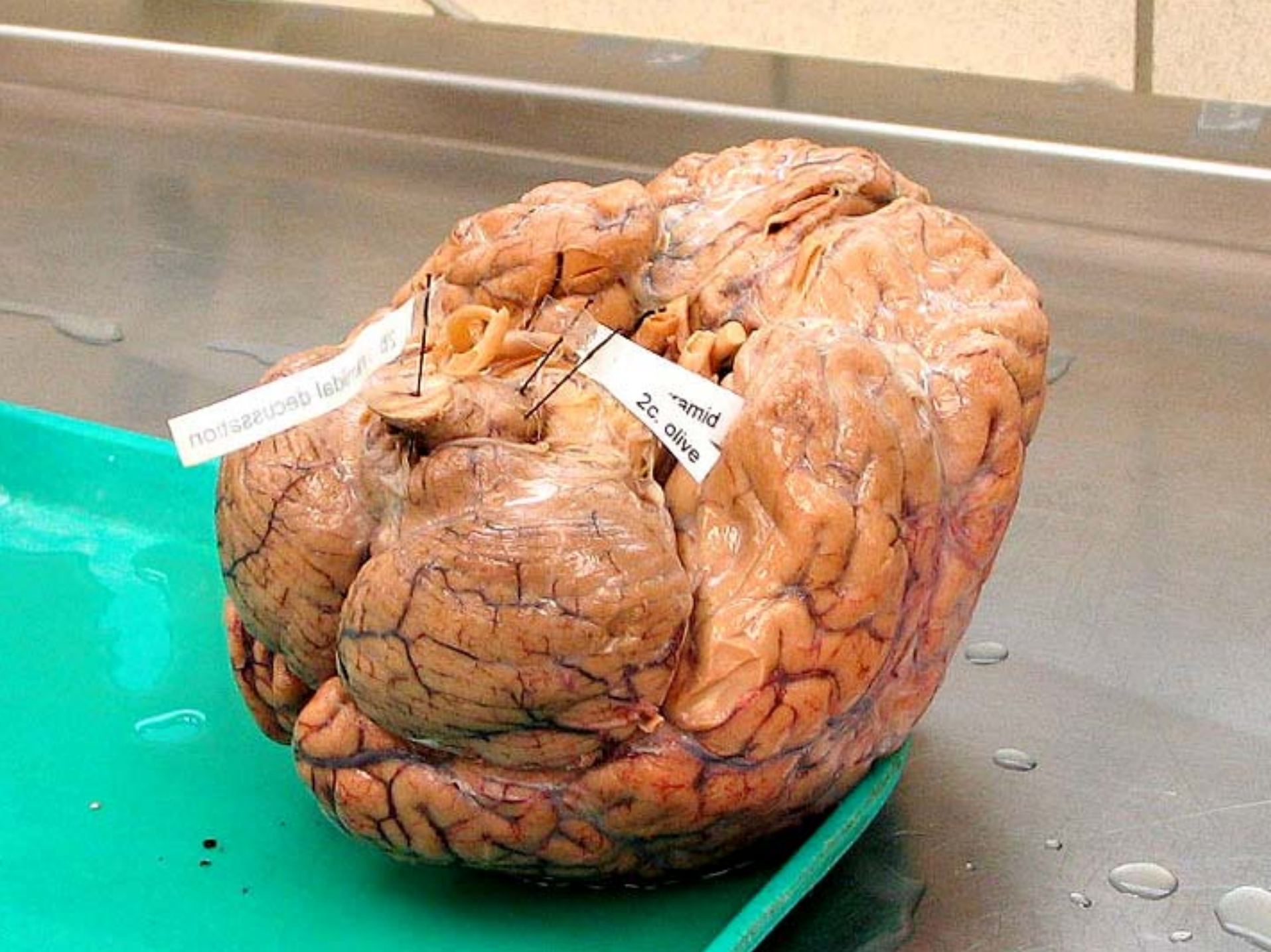
Brainstem and Cerebral Circulation

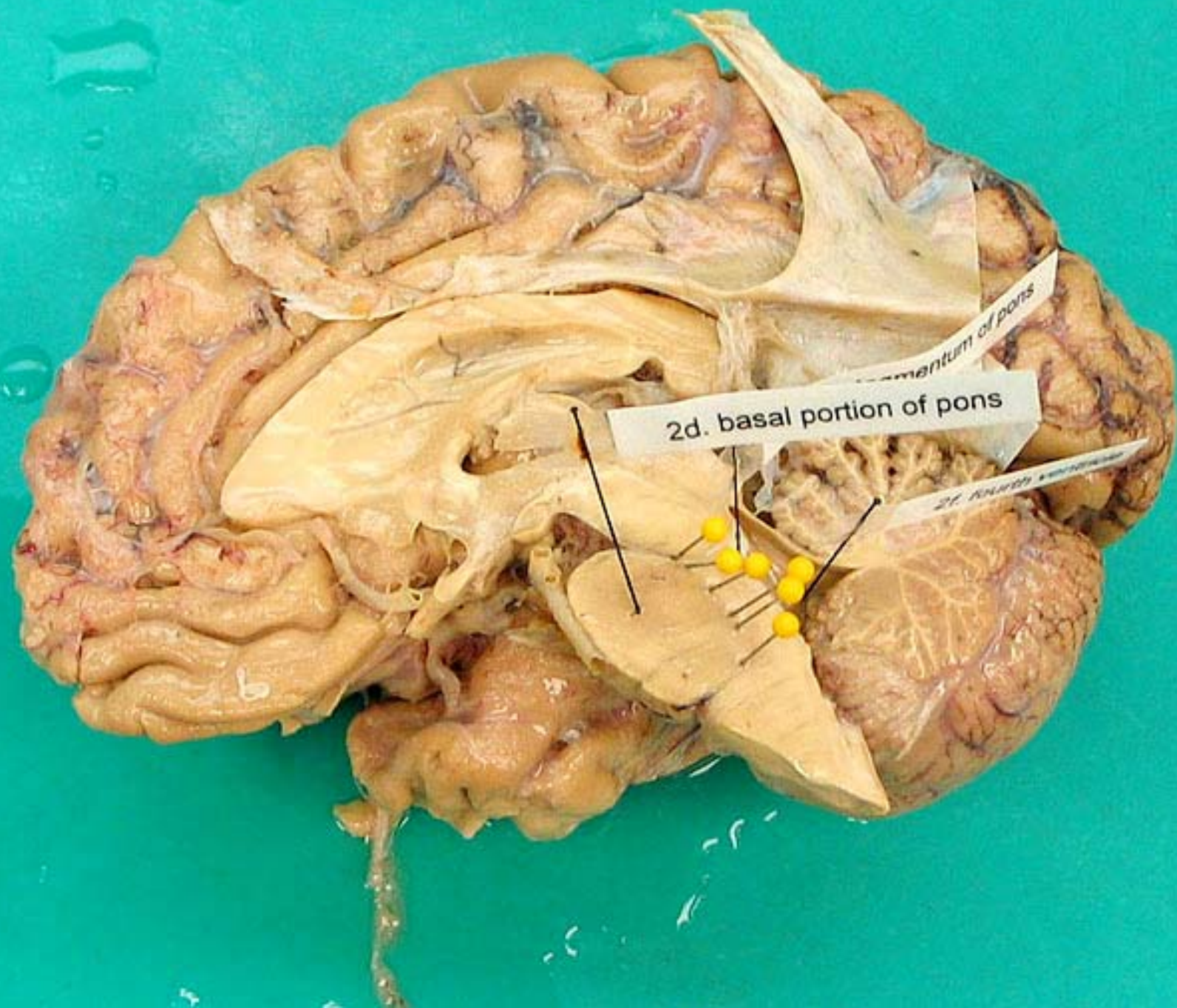


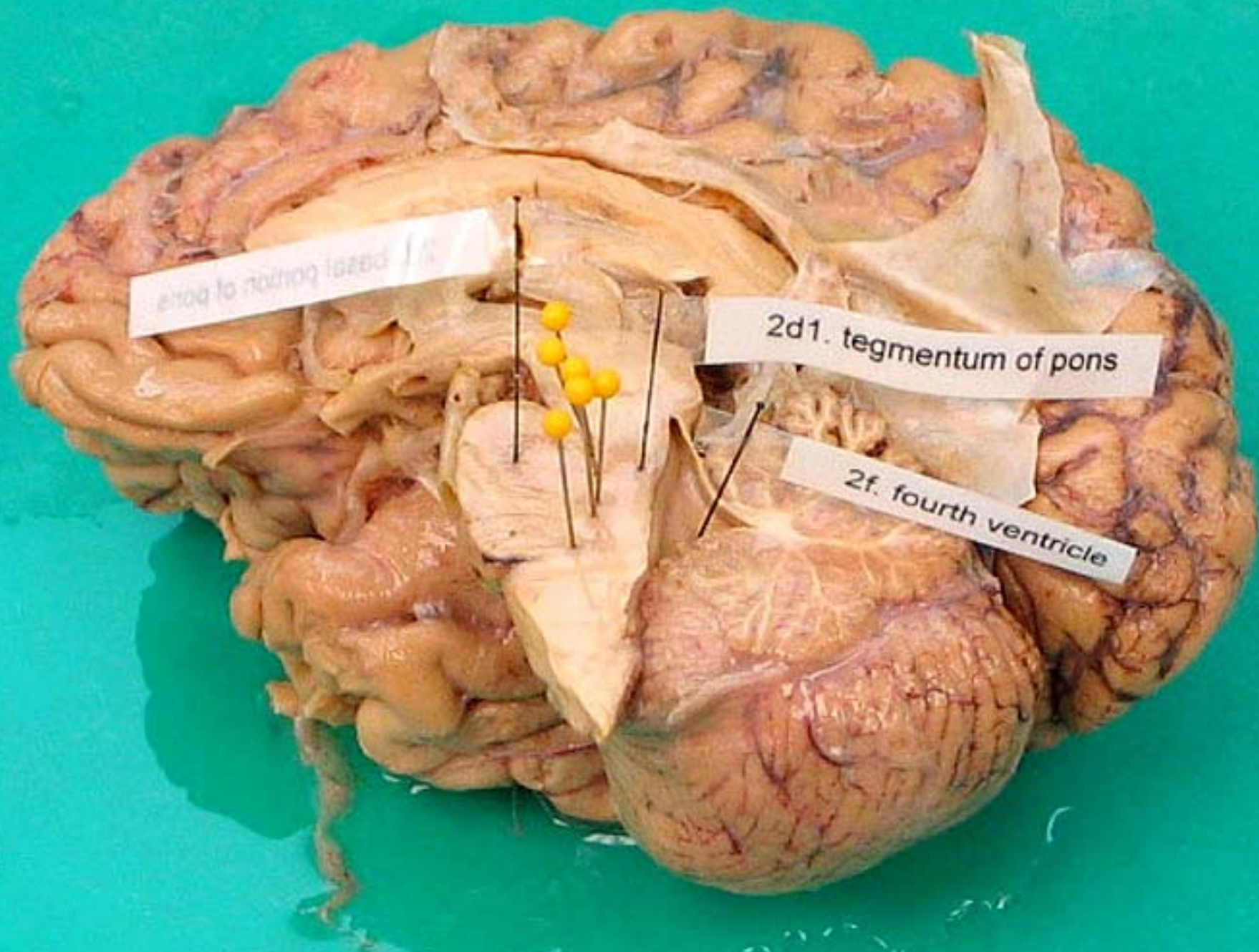
2a. pyramid

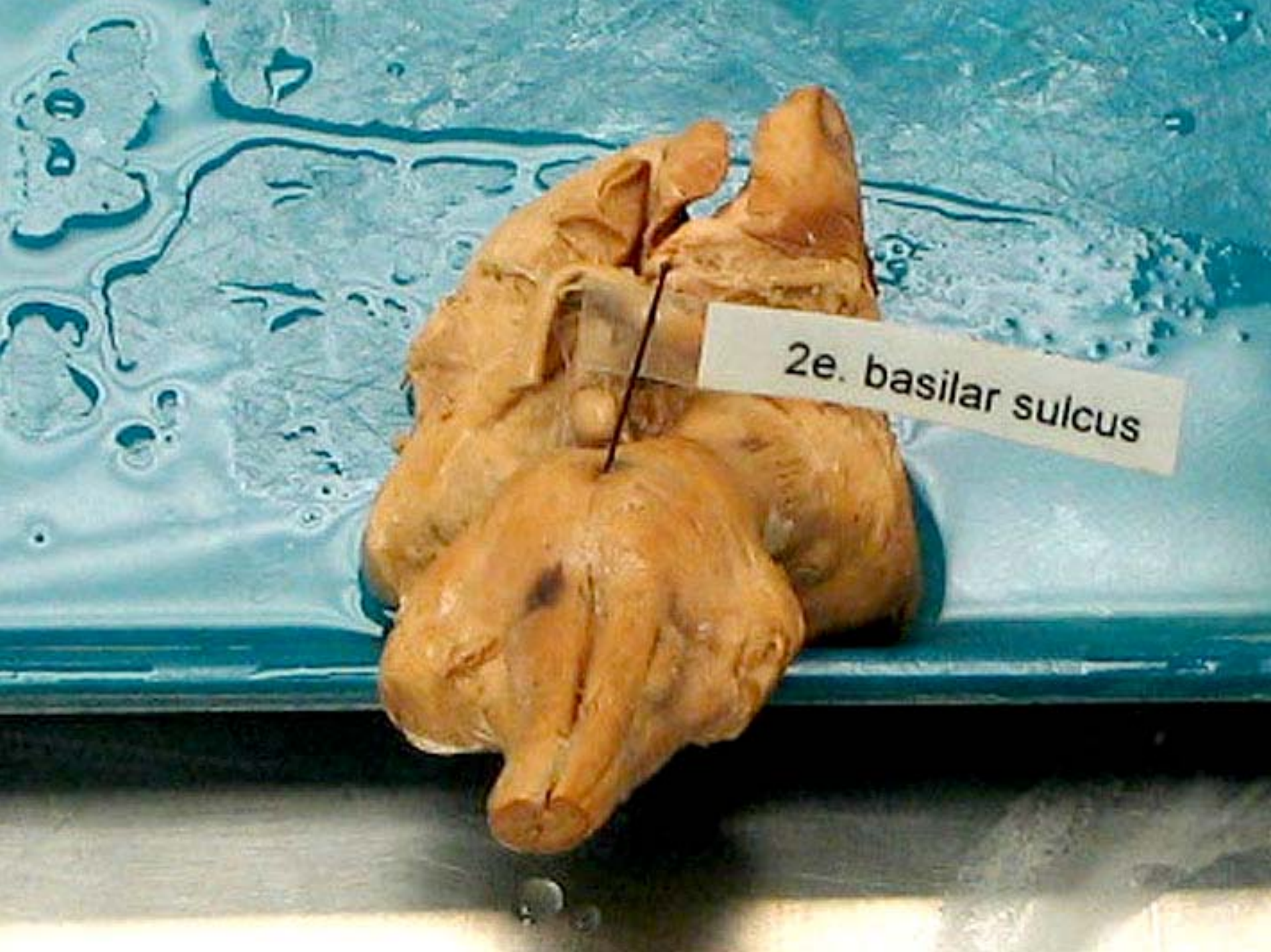


2b. pyramidal decussation
pyramid



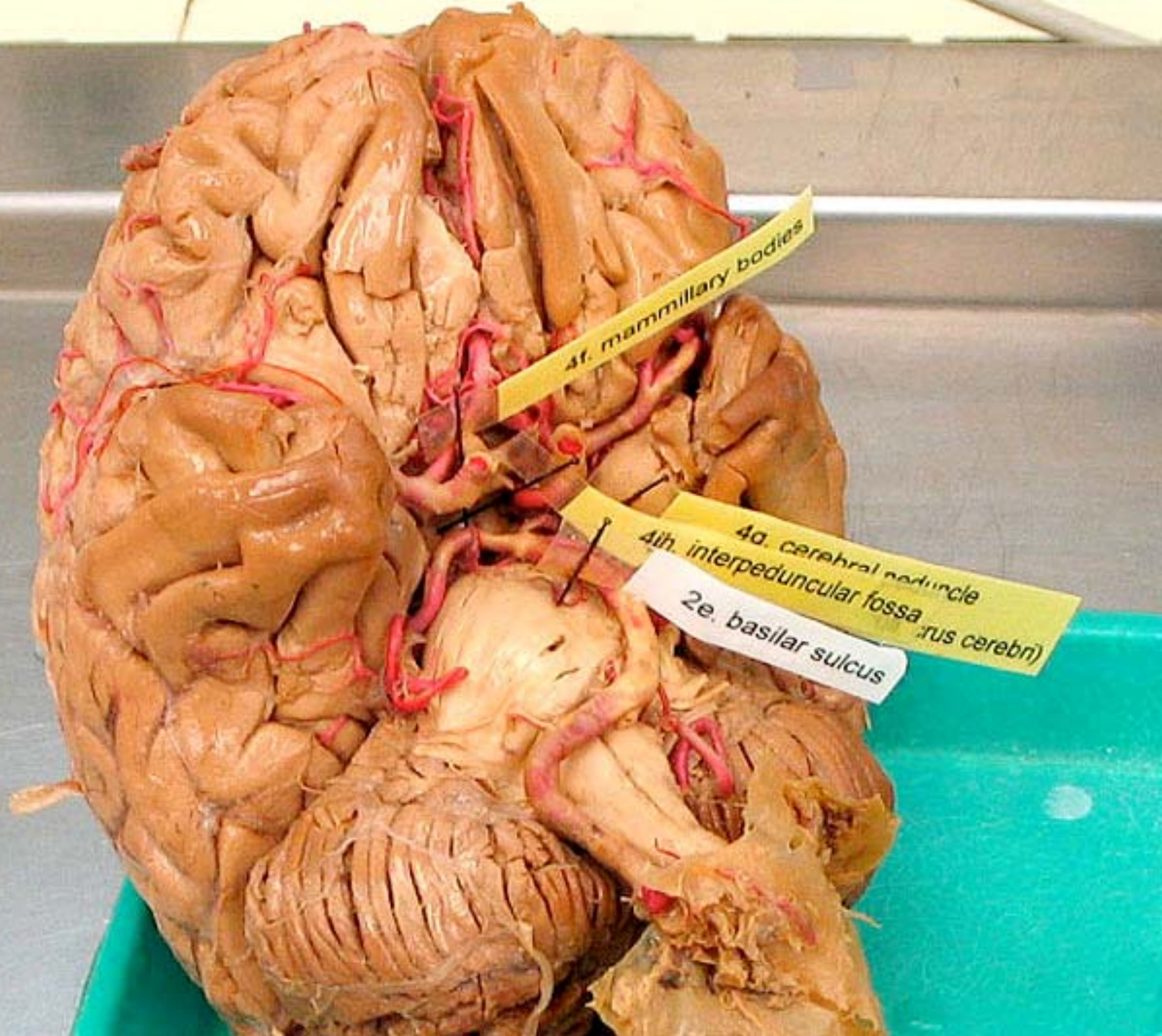


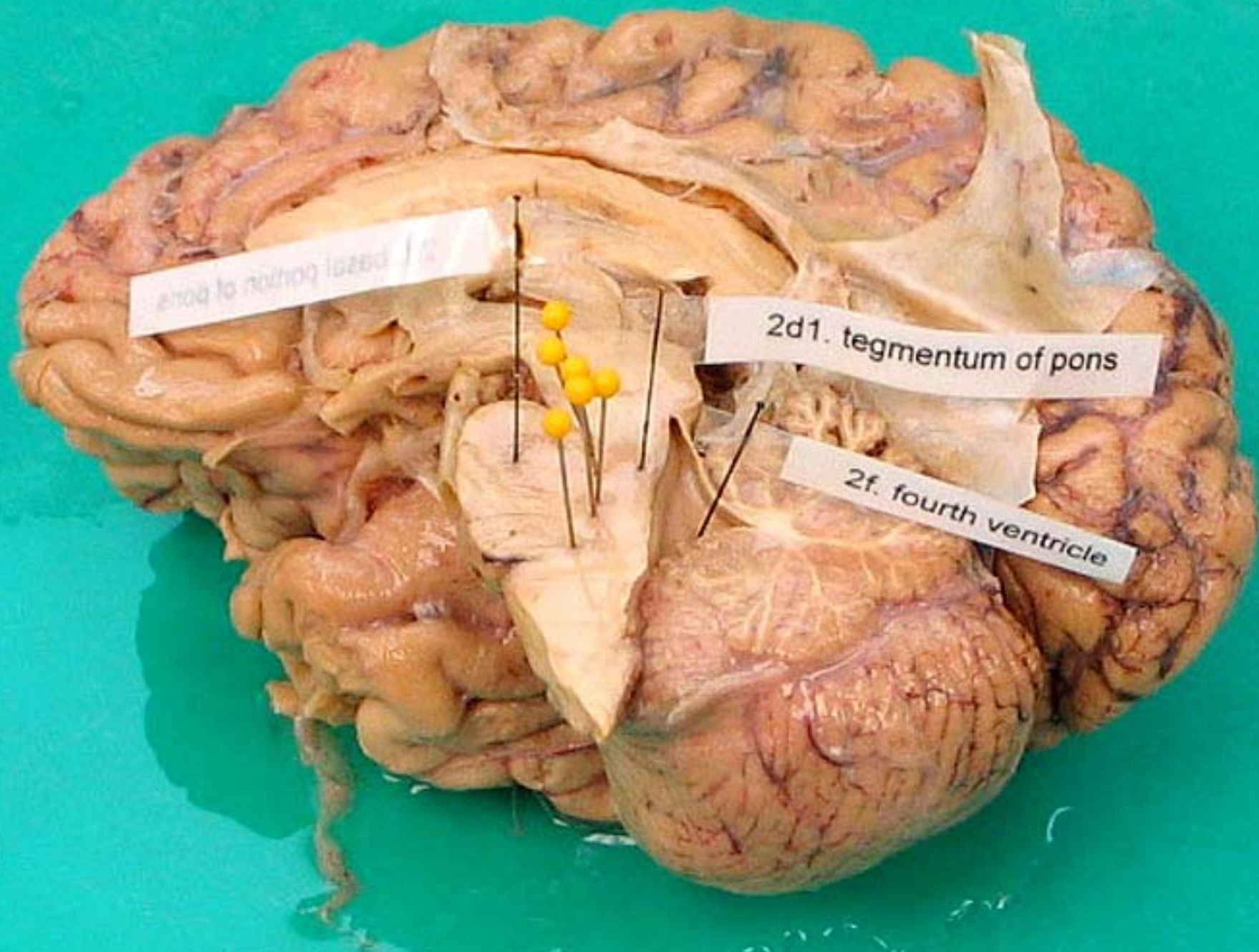




2e. basilar sulcus

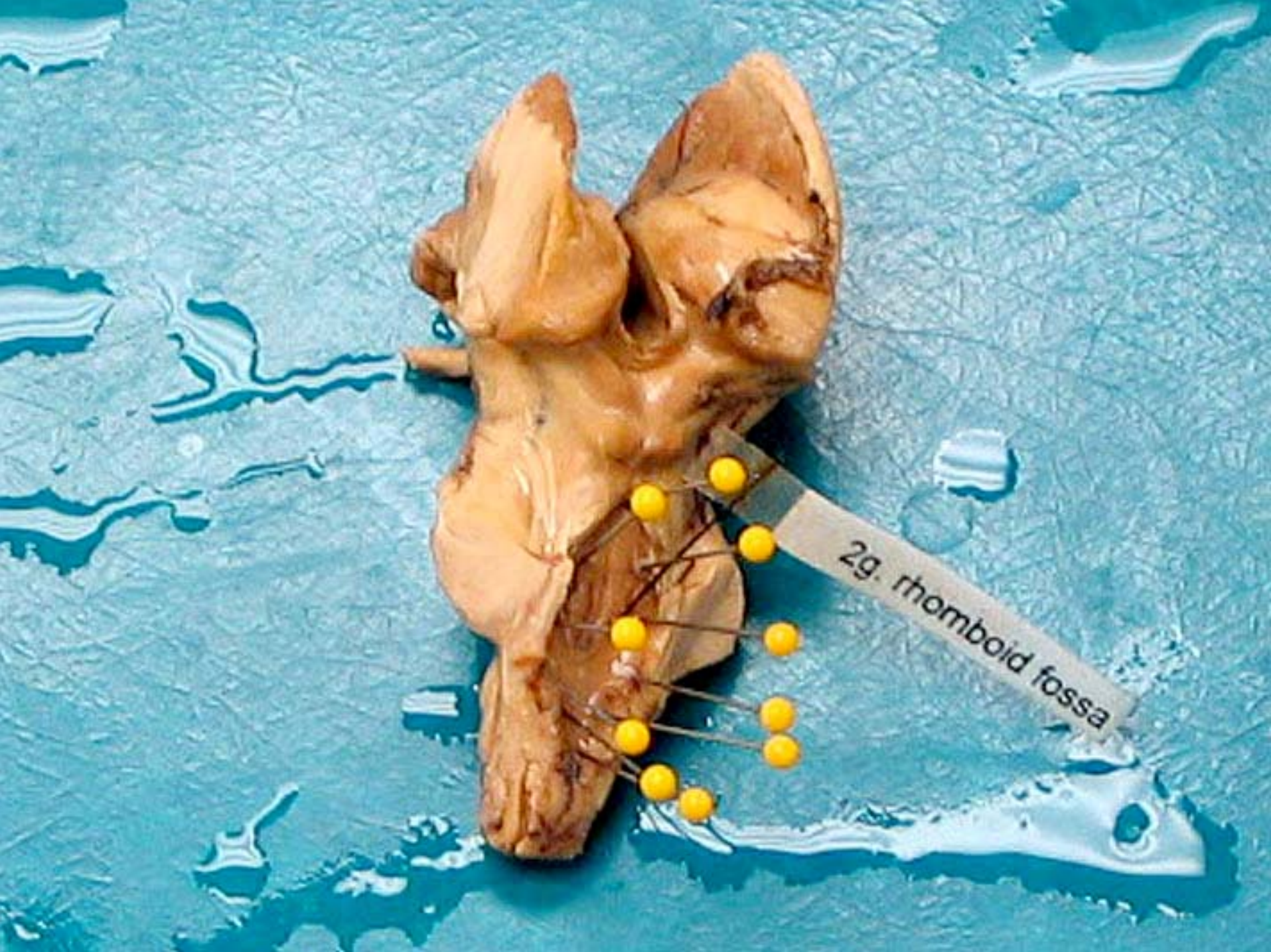
This image shows a dissected anatomical specimen, likely the base of a human brain, resting on a blue surface. A thin, dark pointer is directed at a specific anatomical feature. A white label with black text is placed next to the pointer. The specimen is light brown and has a complex, irregular shape with various folds and depressions.



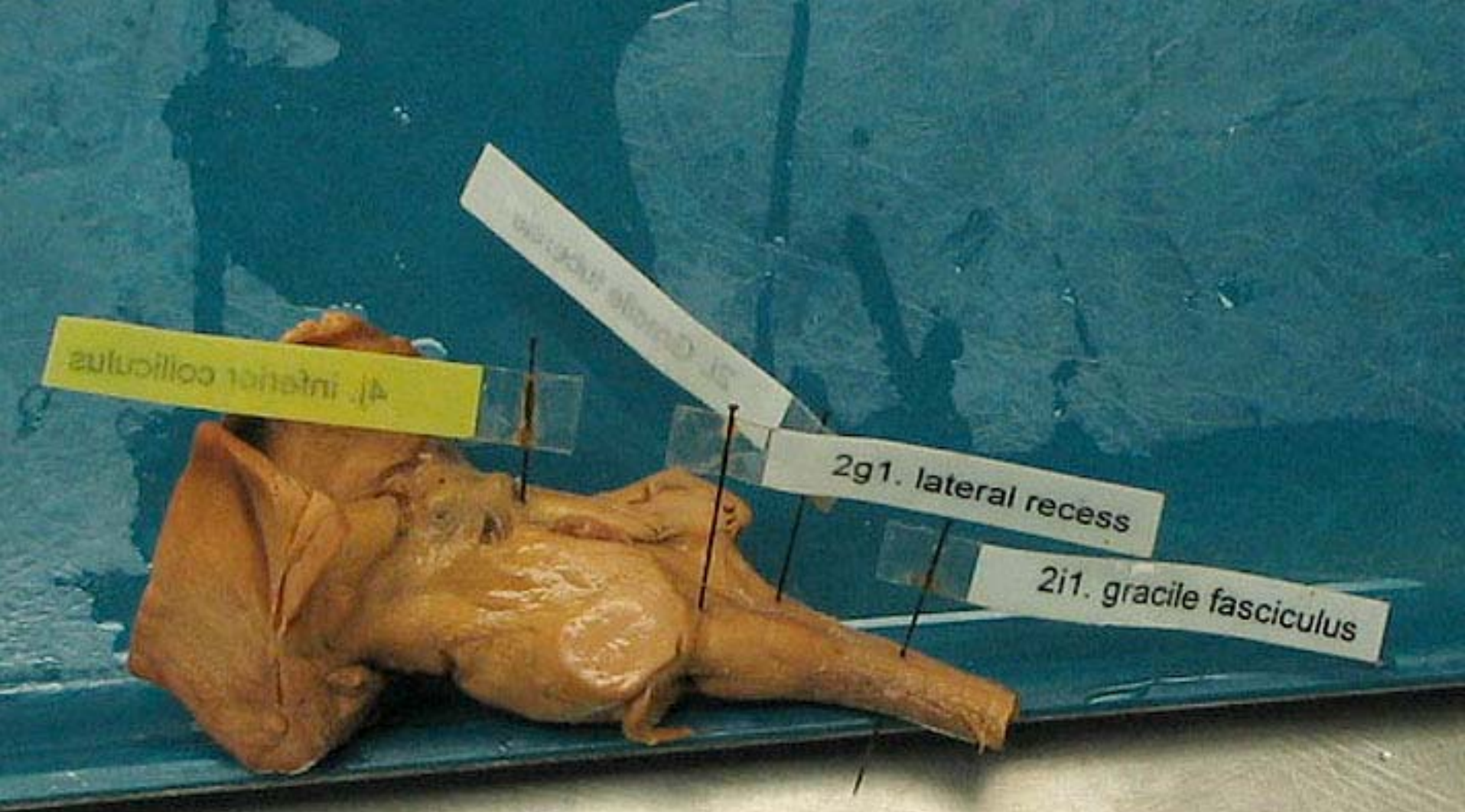




2f1. choroid plexus



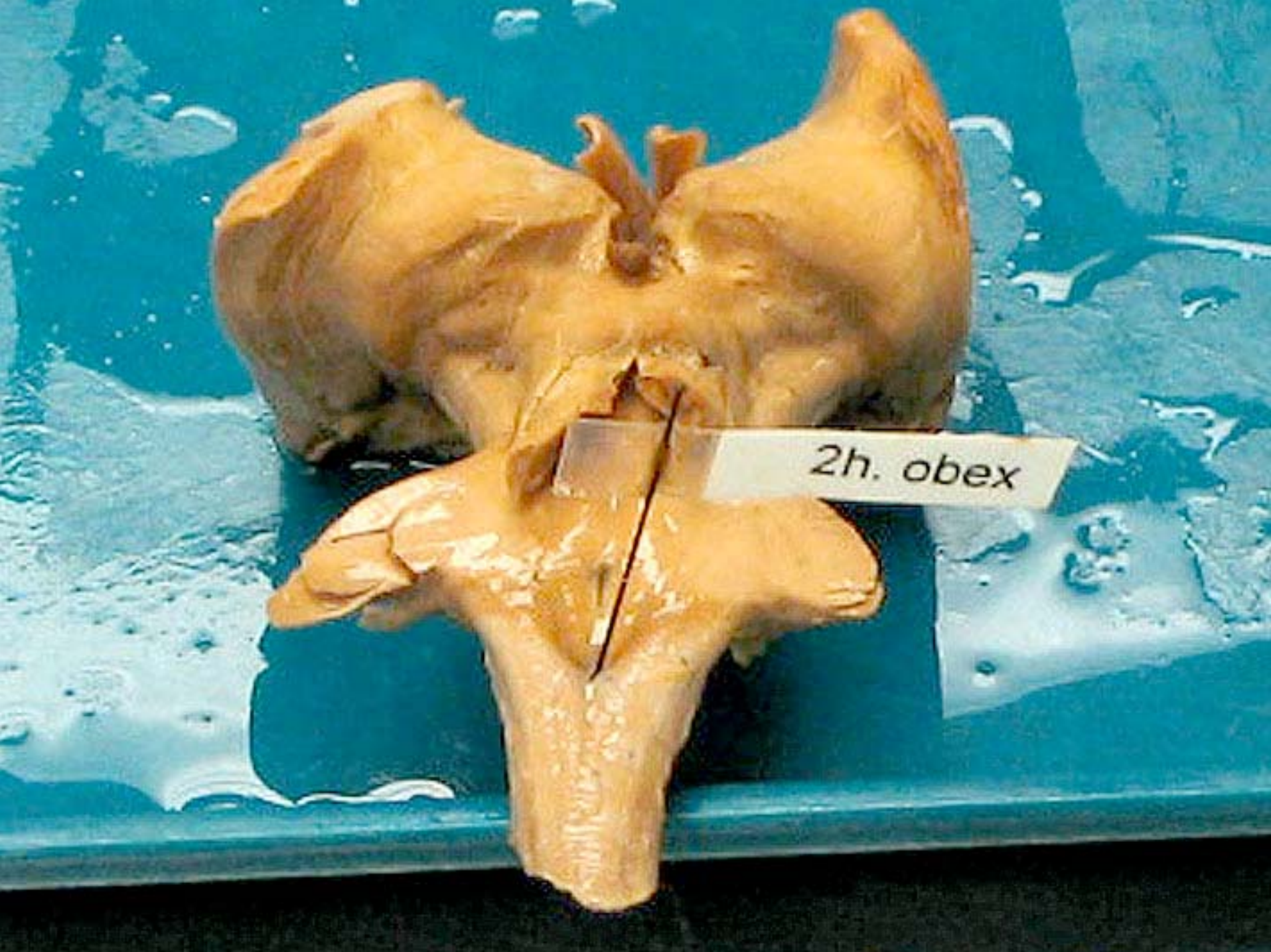
2g. rhomboid fossa



4. inferior colliculus

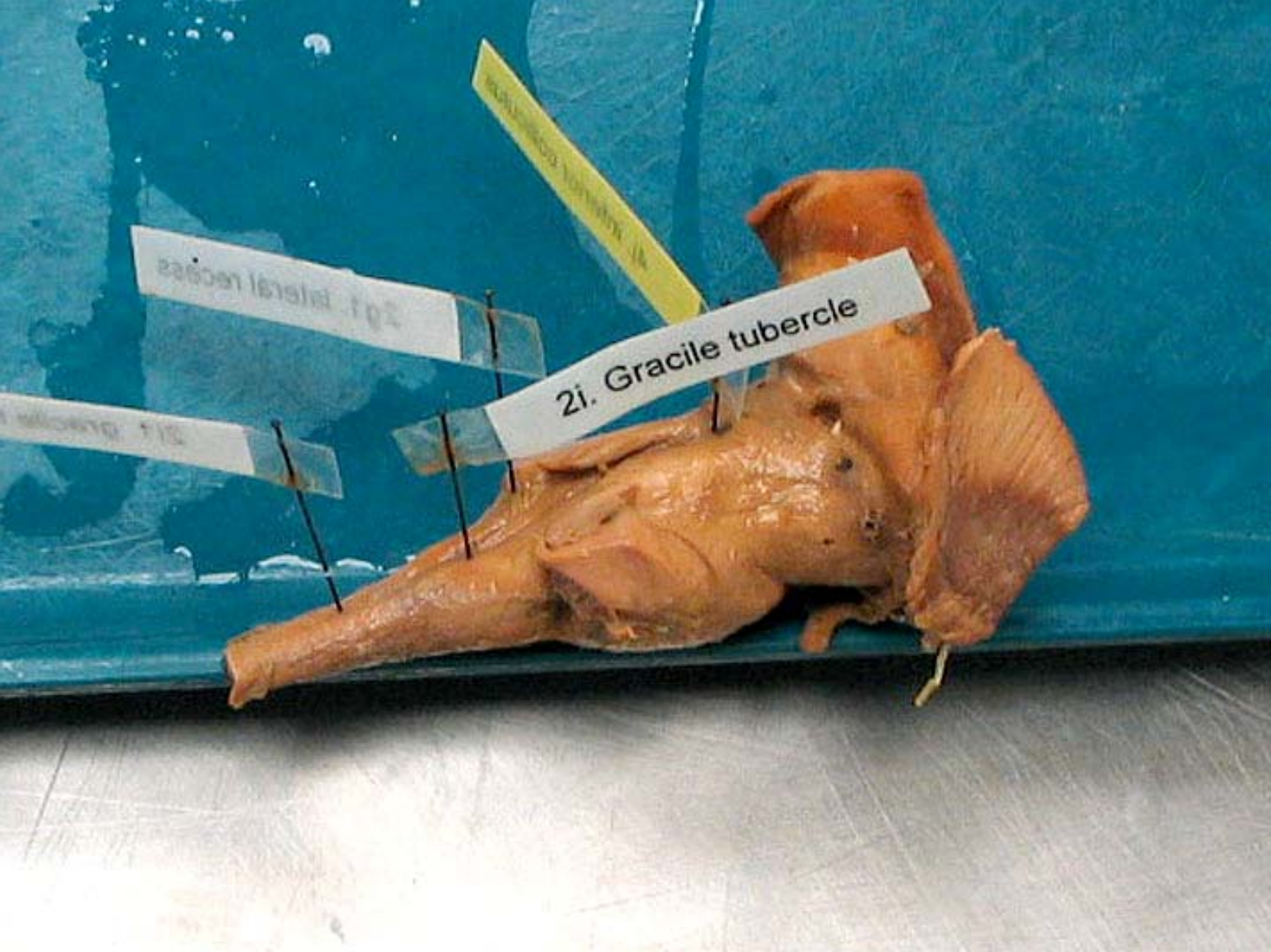
2g1. lateral recess

2i1. gracile fasciculus



2h. obex

This image shows a dissected anatomical specimen, likely a section of a brainstem, resting on a blue surface. The specimen is light-colored and has a complex, somewhat star-like shape with several lobes. A small, rectangular, light-colored label with the text "2h. obex" is placed on the specimen. A thin, dark line is drawn on the specimen, extending from the label towards the bottom. The background is a blue surface with some white, foamy residue.



2i. Gracile tubercle

201. Bilateral recesses

4. inferior colliculus

2g1. lateral recess

2i1. gracile fasciculus



4i. superior colliculus

2j. cuneate tubercle

2j1. cuneate fasciculus



4i. superior colliculus

2j. cuneate tubercle

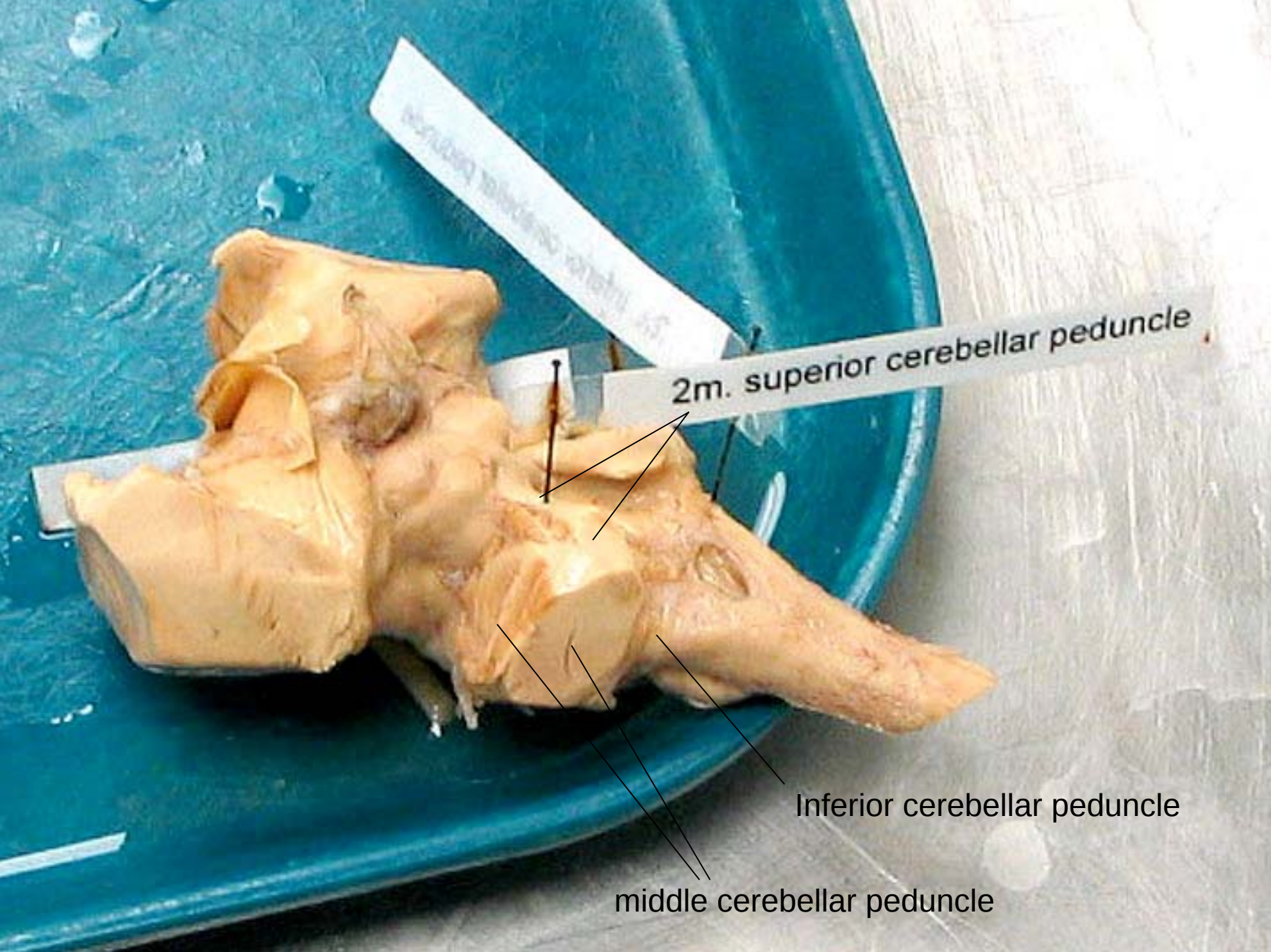
2j1. cuneate fasciculus



2k. inferior cerebellar peduncle

2l. middle cerebellar peduncle

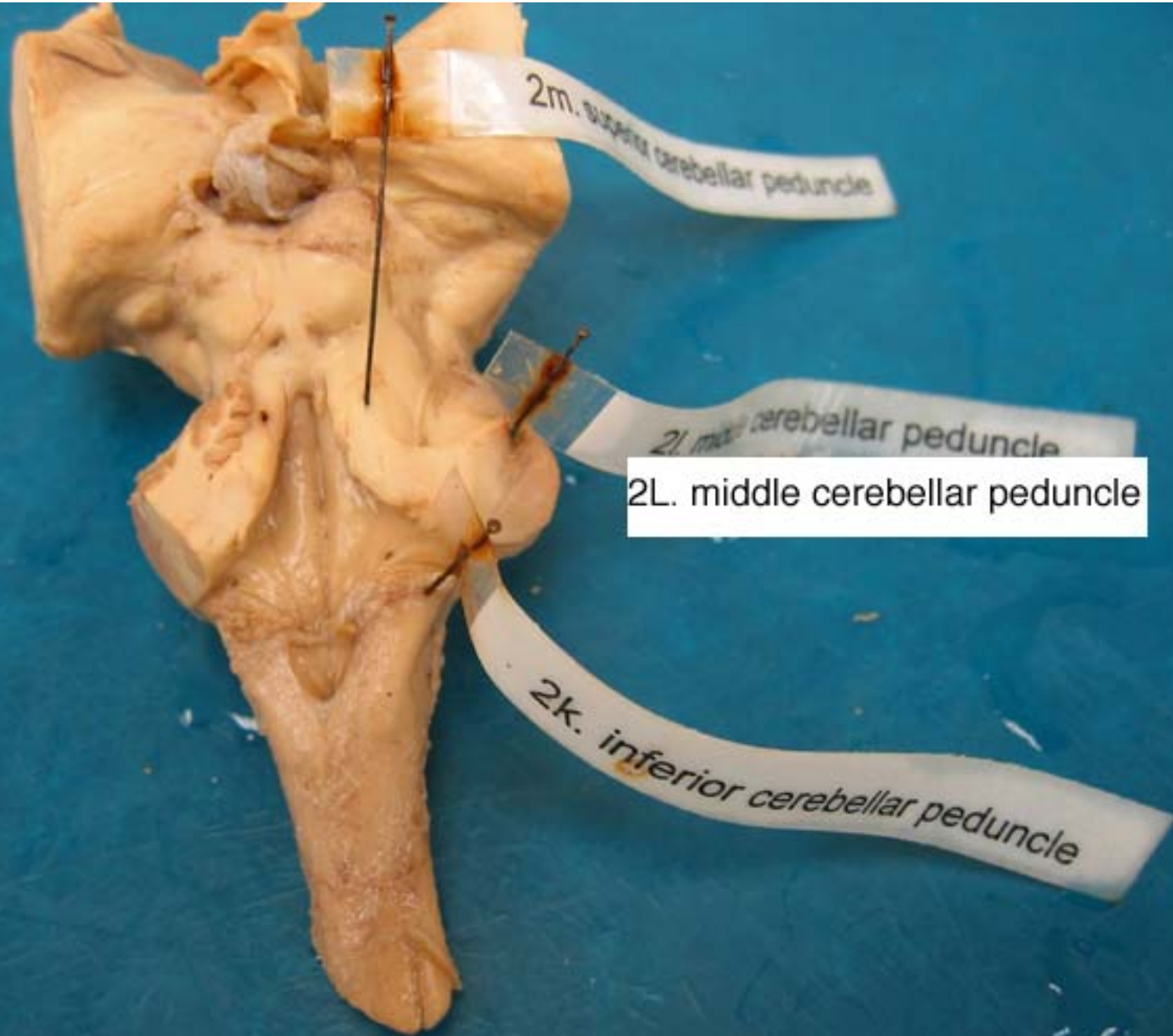




2m. superior cerebellar peduncle

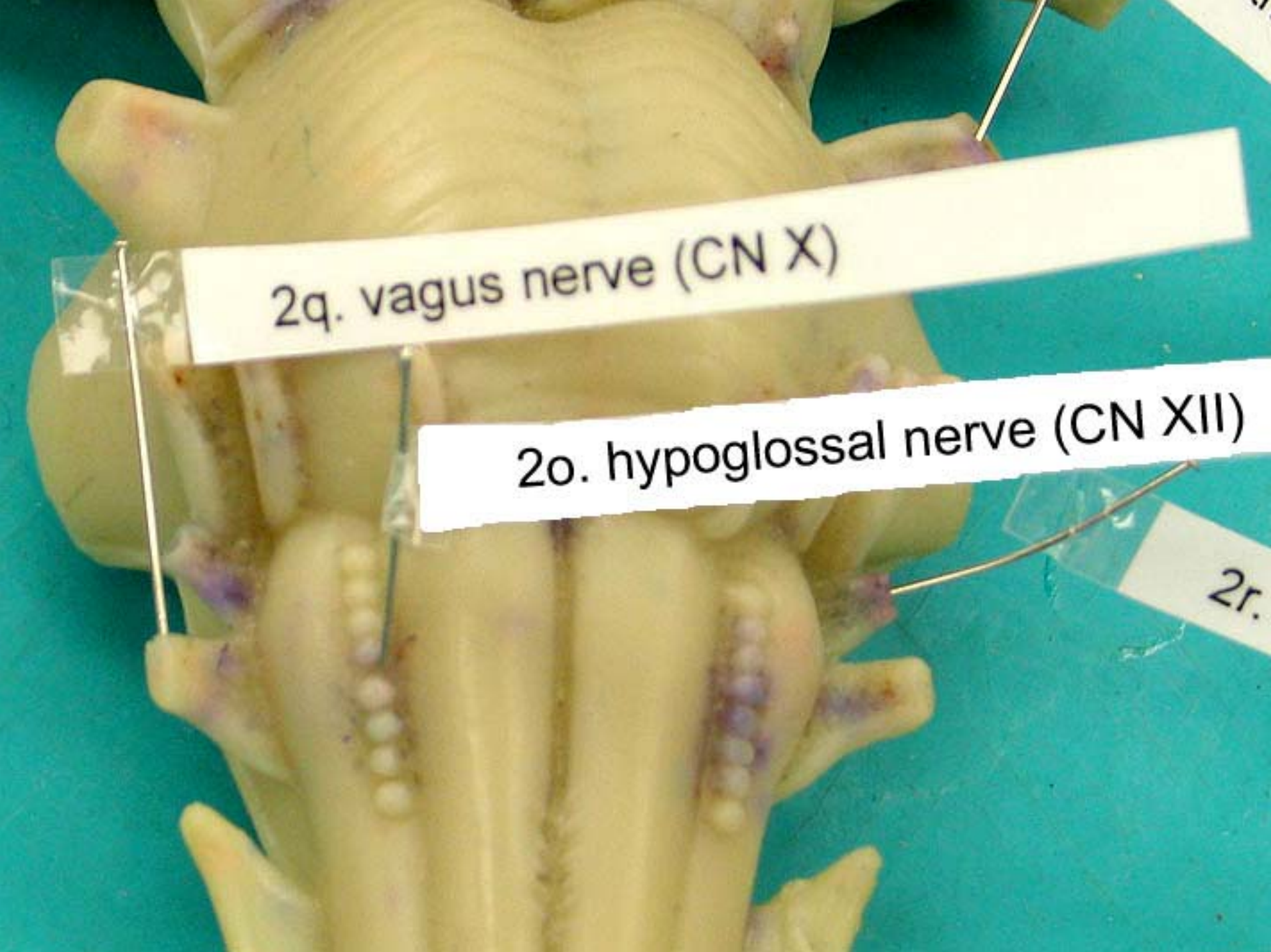
Inferior cerebellar peduncle

middle cerebellar peduncle





2n. superior medullary velum



2q. vagus nerve (CN X)

This image shows a detailed anatomical model of the human head and neck, focusing on the pharyngeal region. The model is light-colored and shows various structures including the larynx, trachea, and the base of the skull. Two specific nerves are highlighted with labels and pins. The vagus nerve (CN X) is labeled '2q. vagus nerve (CN X)' and is shown as a thin, light-colored structure. The hypoglossal nerve (CN XII) is labeled '2o. hypoglossal nerve (CN XII)' and is shown as a thicker, more prominent structure. The model is set against a teal background.

2o. hypoglossal nerve (CN XII)

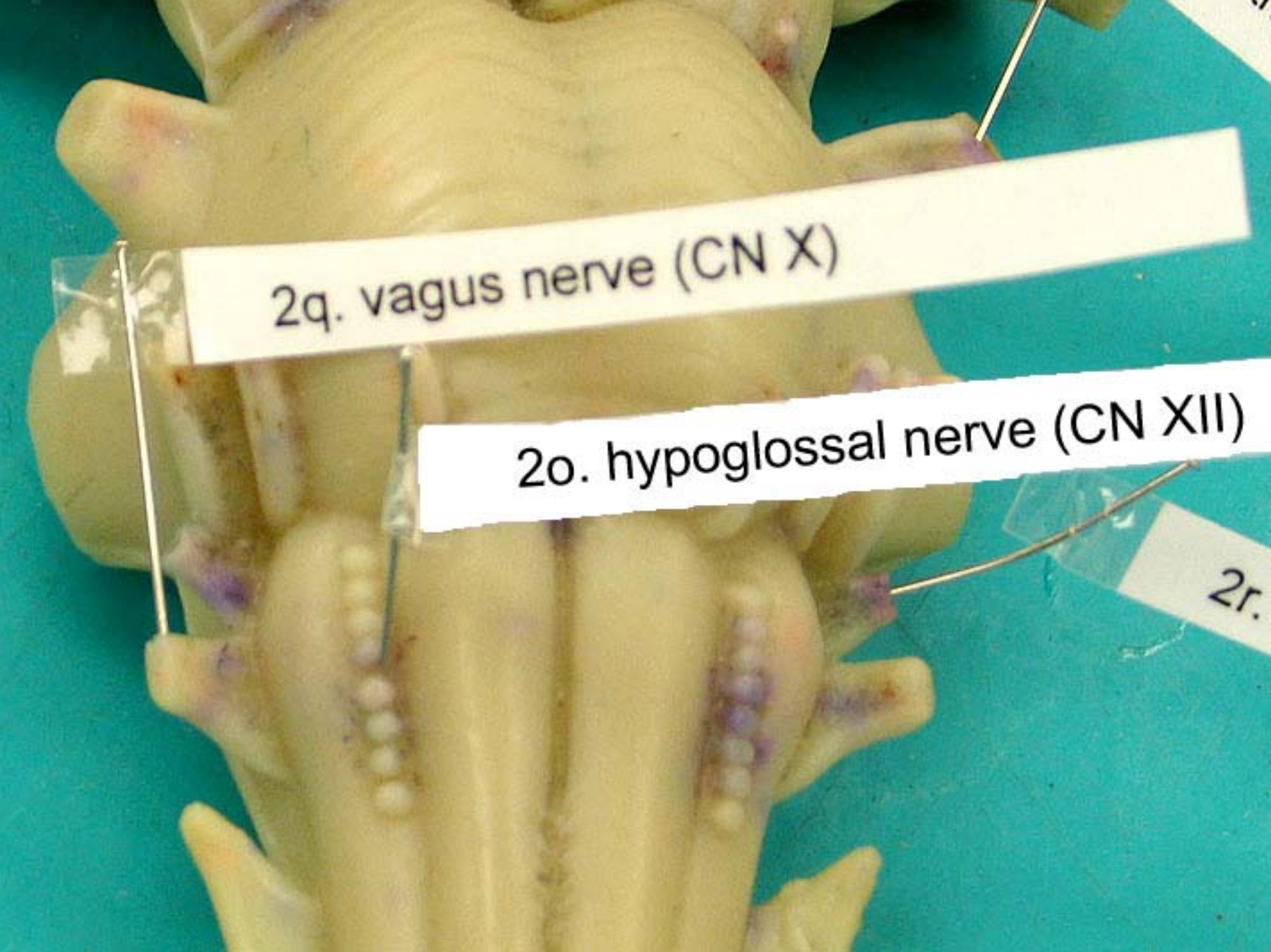
2r.



4e. trochlear nerve (CN IV)

2u. abducens nerve (CN VI)

2p. accessory nerve (CN XI)



2q. vagus nerve (CN X)

This image shows a detailed anatomical model of the human head and neck, focusing on the pharyngeal region. The model is light-colored and shows various structures including the larynx, trachea, and the base of the skull. Two specific nerves are highlighted with purple dye and labeled with white tags. The vagus nerve (CN X) is labeled '2q. vagus nerve (CN X)' and is shown descending from the base of the skull. The hypoglossal nerve (CN XII) is labeled '2o. hypoglossal nerve (CN XII)' and is shown ascending from the base of the skull. A third label '2r.' is partially visible on the right side of the image. The model is set against a teal background.

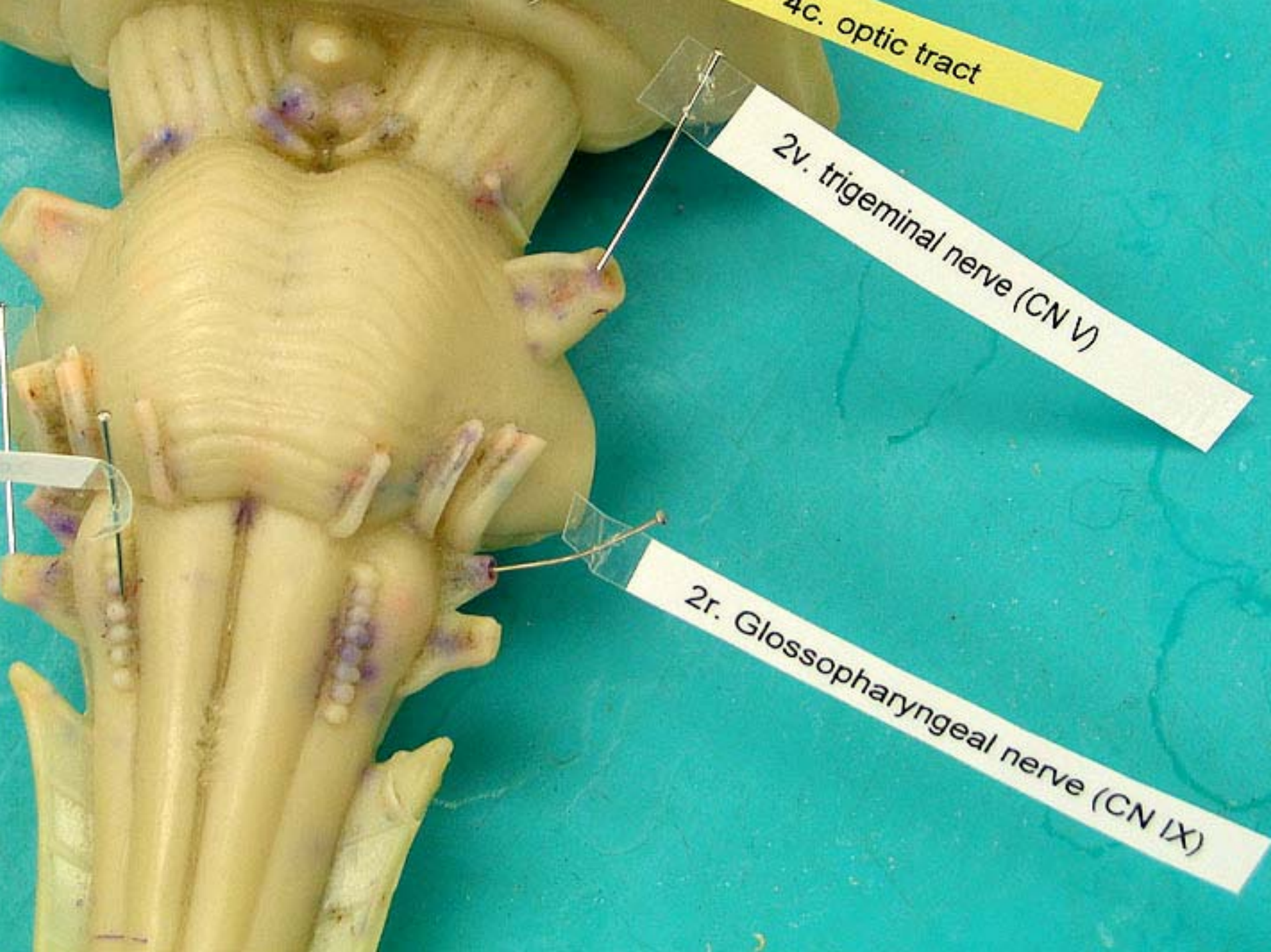
2o. hypoglossal nerve (CN XII)

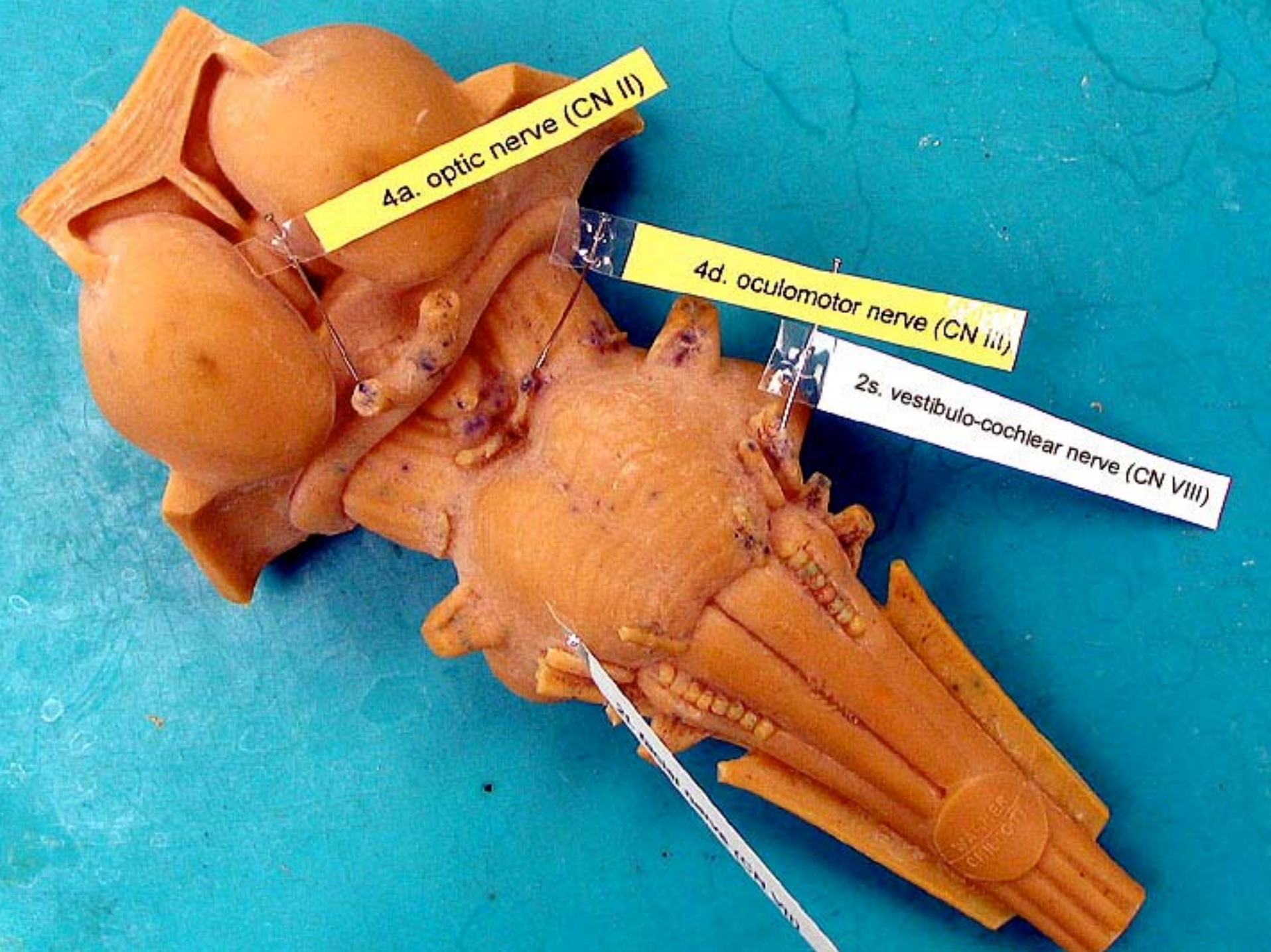
2r.

4c. optic tract

2v. trigeminal nerve (CN V)

2r. Glossopharyngeal nerve (CN IX)





4a. optic nerve (CN II)

4d. oculomotor nerve (CN III)

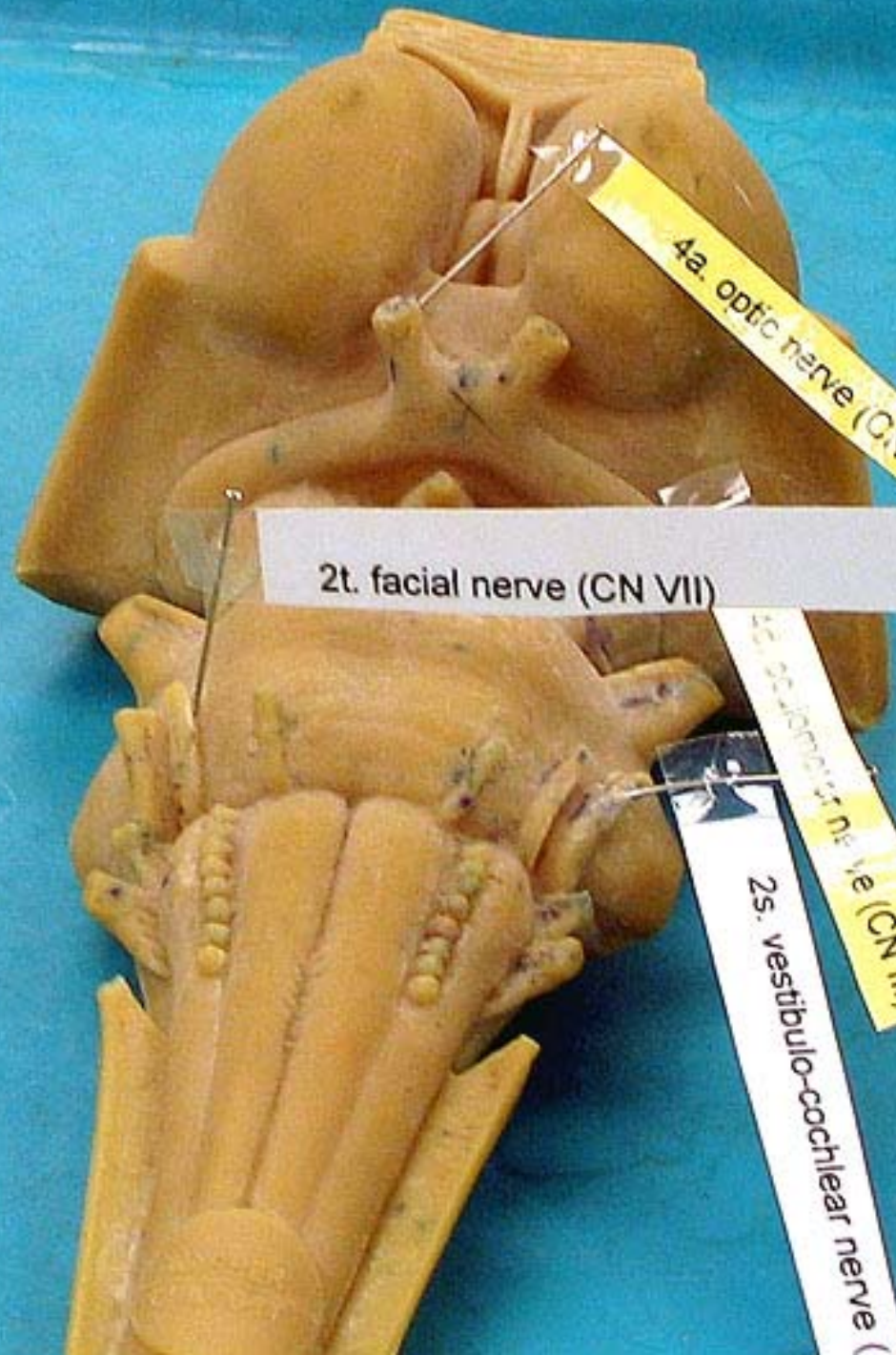
2s. vestibulo-cochlear nerve (CN VIII)

4a. optic nerve (CN II)

2t. facial nerve (CN VII)

2s. vestibulo-cochlear nerve (CN VIII)

3. trigeminal nerve (CN III)





4e. trochlear nerve (CN IV)

2u. abducens nerve (CN VI)

2p. accessory nerve (CN XI)

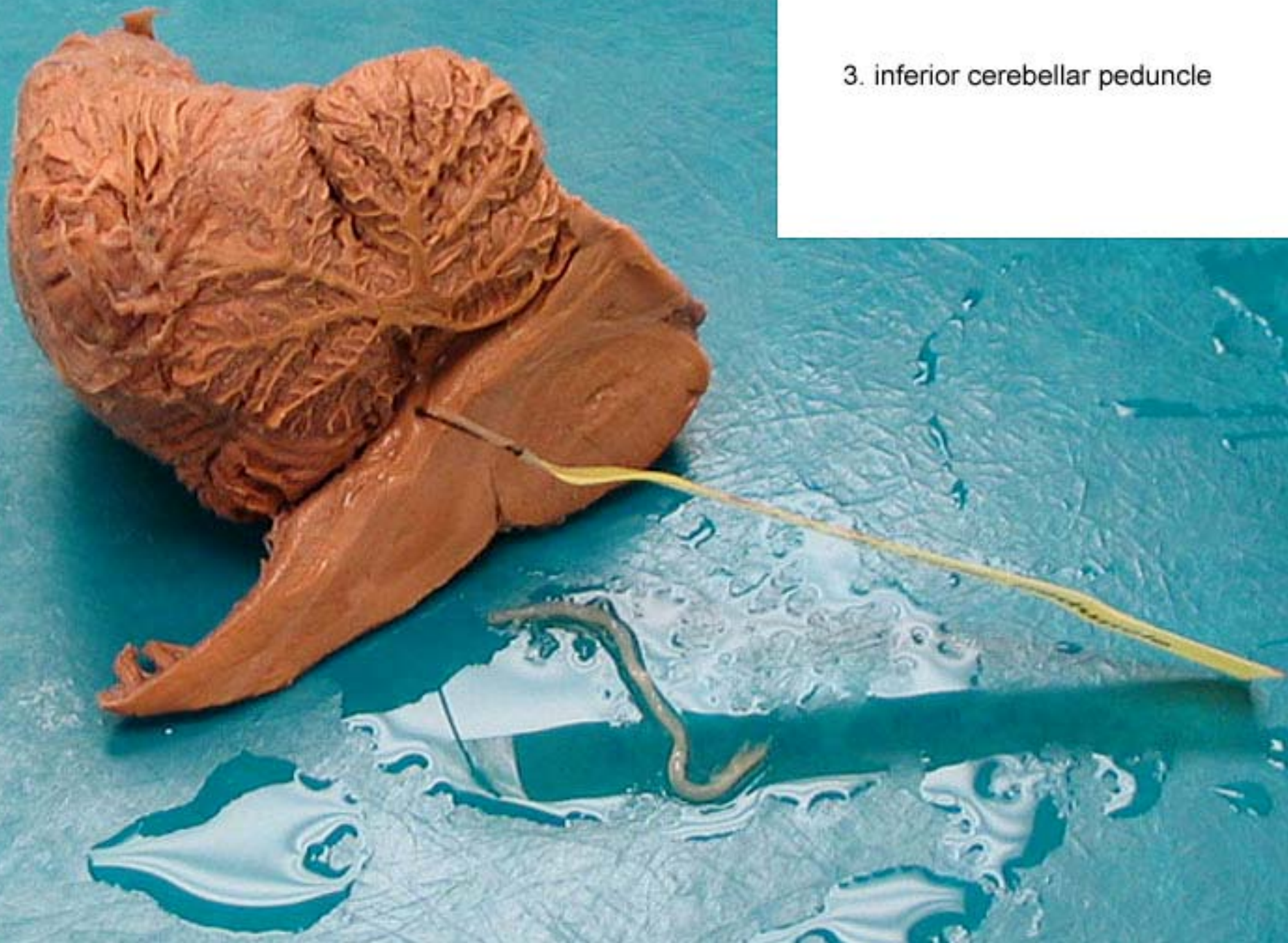


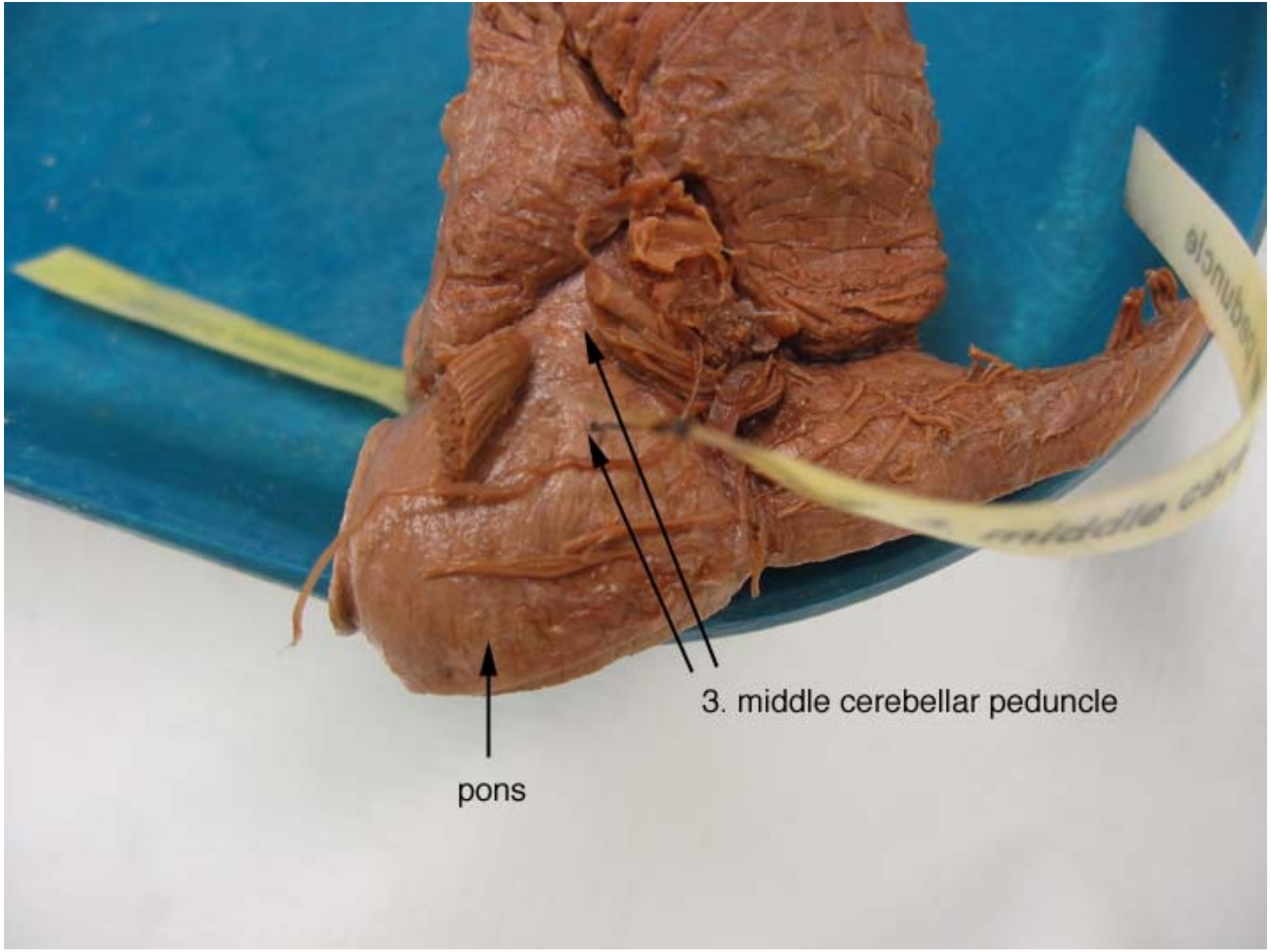
This image shows a detailed anatomical model of the human brainstem and the roots of the cranial nerves. The brainstem is the central part of the brain, consisting of the midbrain, pons, and medulla oblongata. The cranial nerve roots are shown emerging from the brainstem. The model is color-coded to show different structures: the brainstem is light yellow, the cranial nerve roots are pink, and the surrounding structures are light blue. The model is set against a solid blue background. Two labels with leader lines point to specific structures: a yellow label for the optic tract and a white label for the trigeminal nerve.

4c. optic tract

2v. trigeminal nerve (CN V)

3. inferior cerebellar peduncle

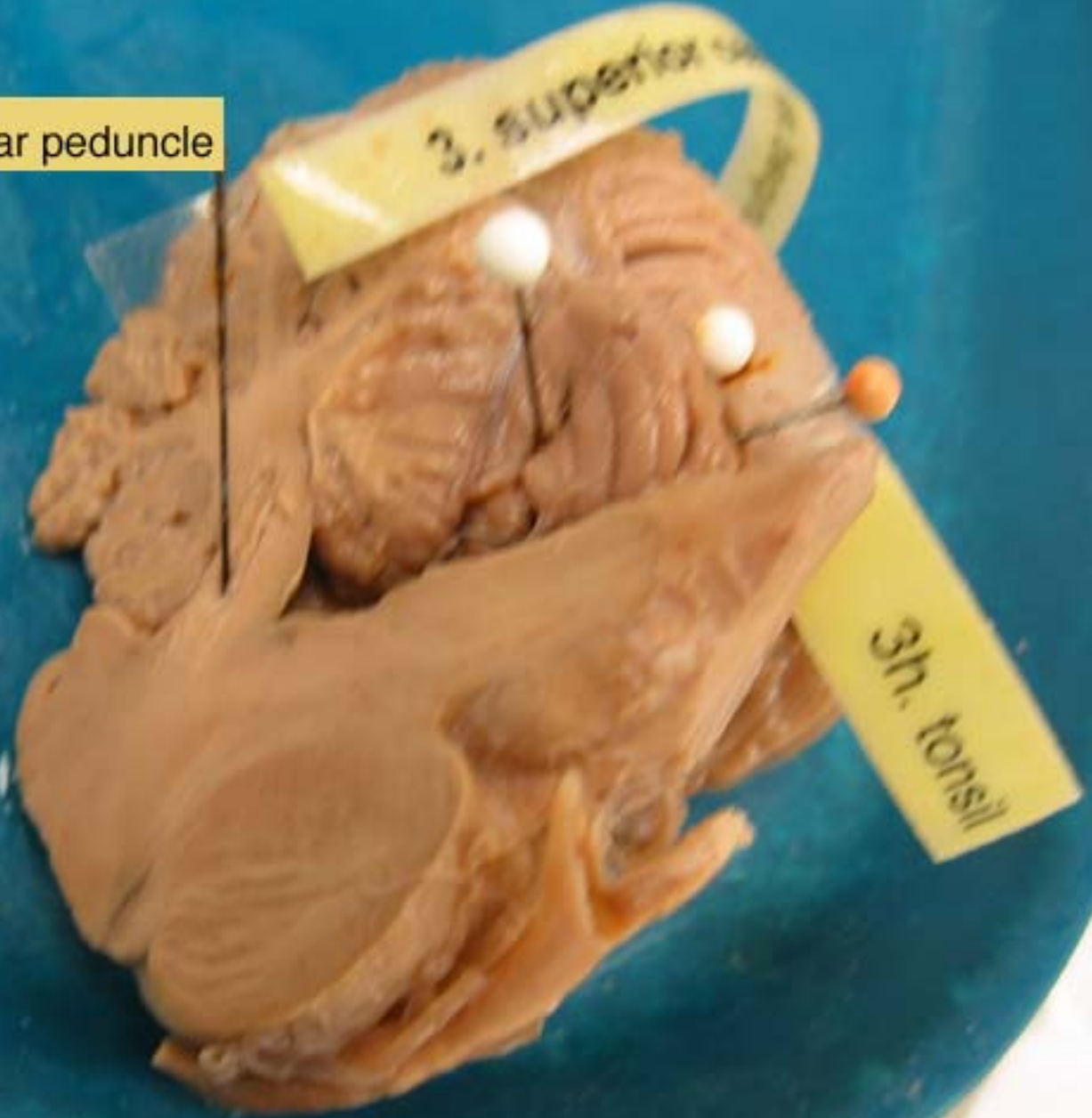




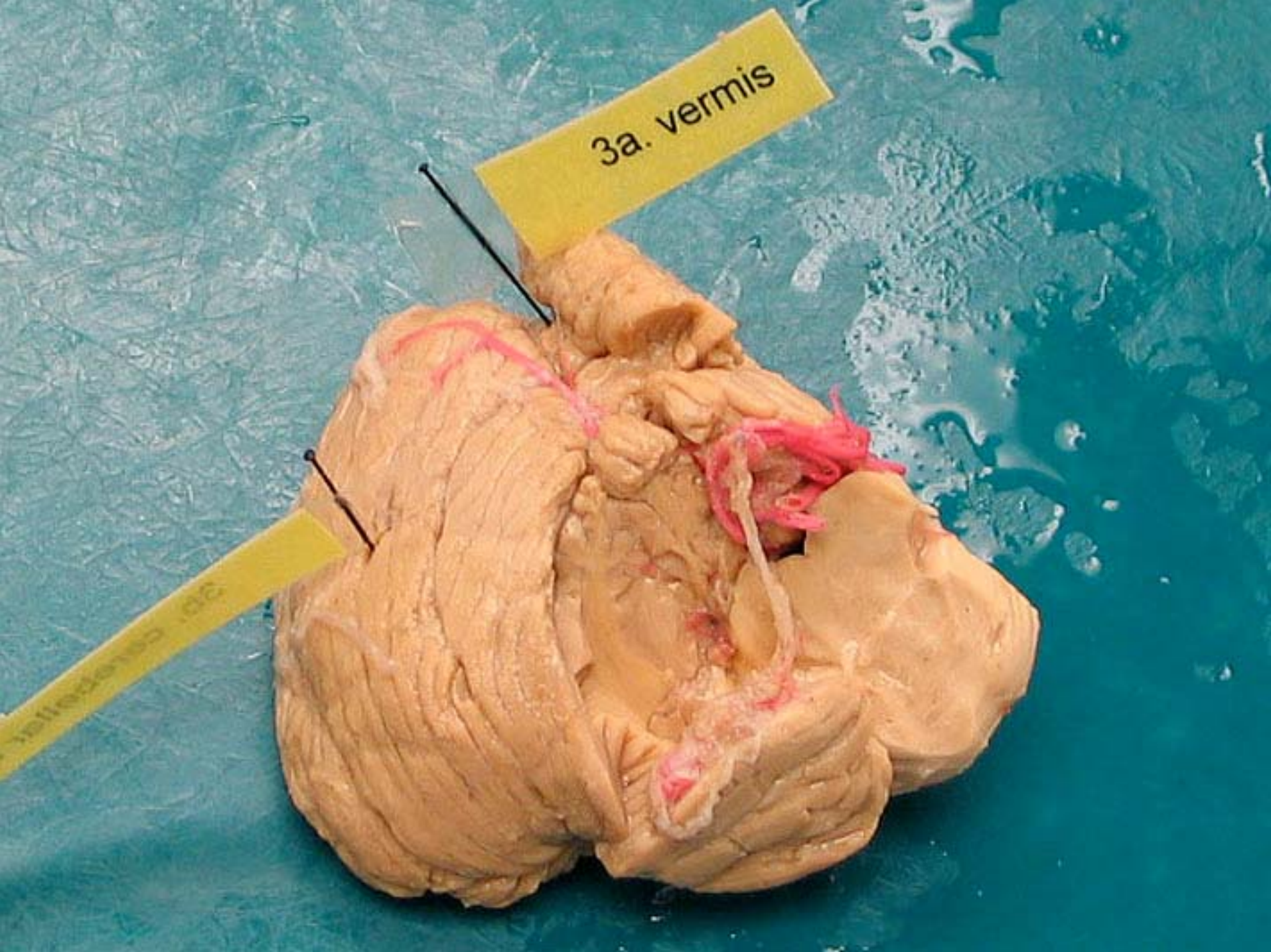
pons

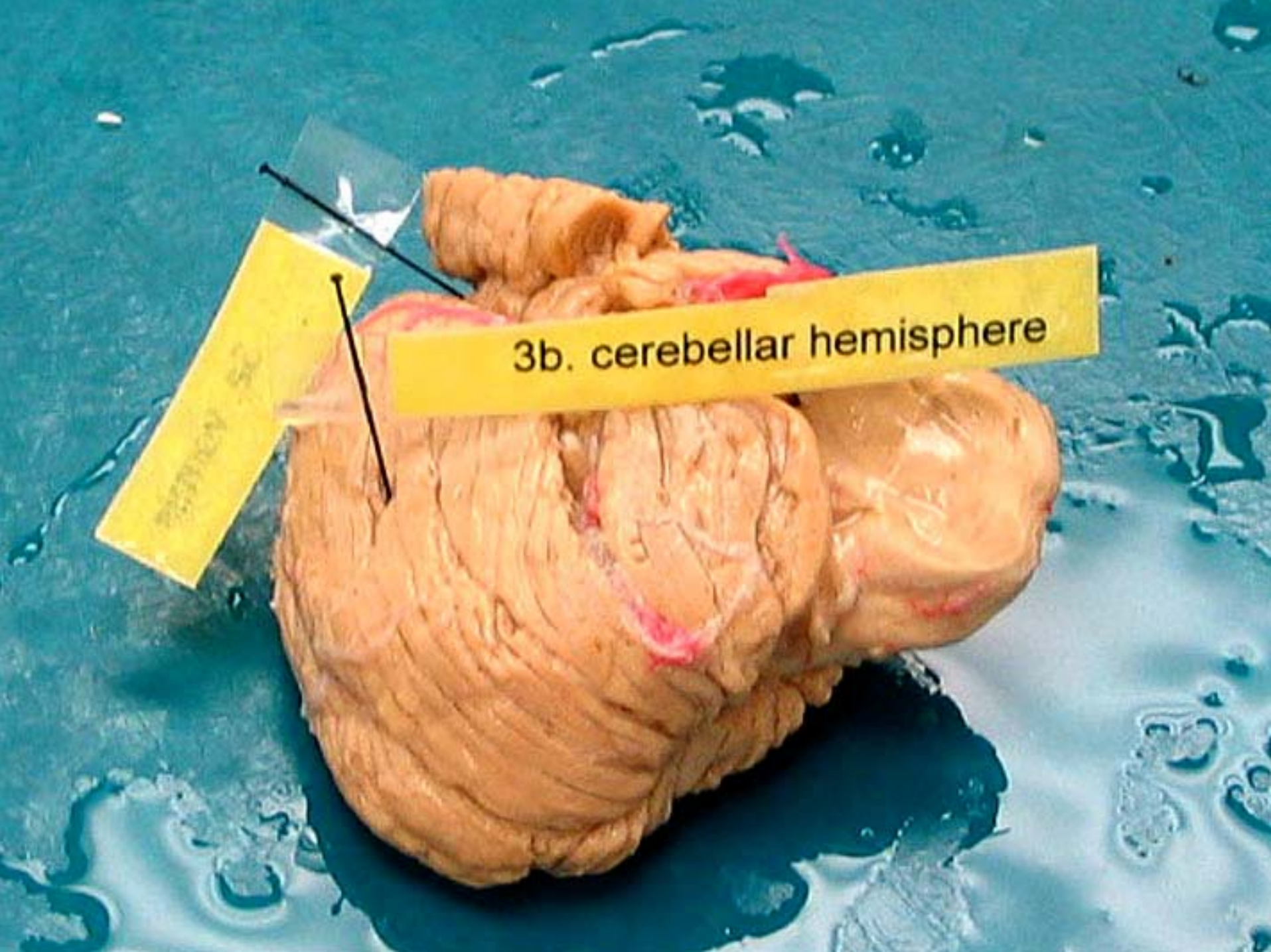
3. middle cerebellar peduncle

3. superior cerebellar peduncle



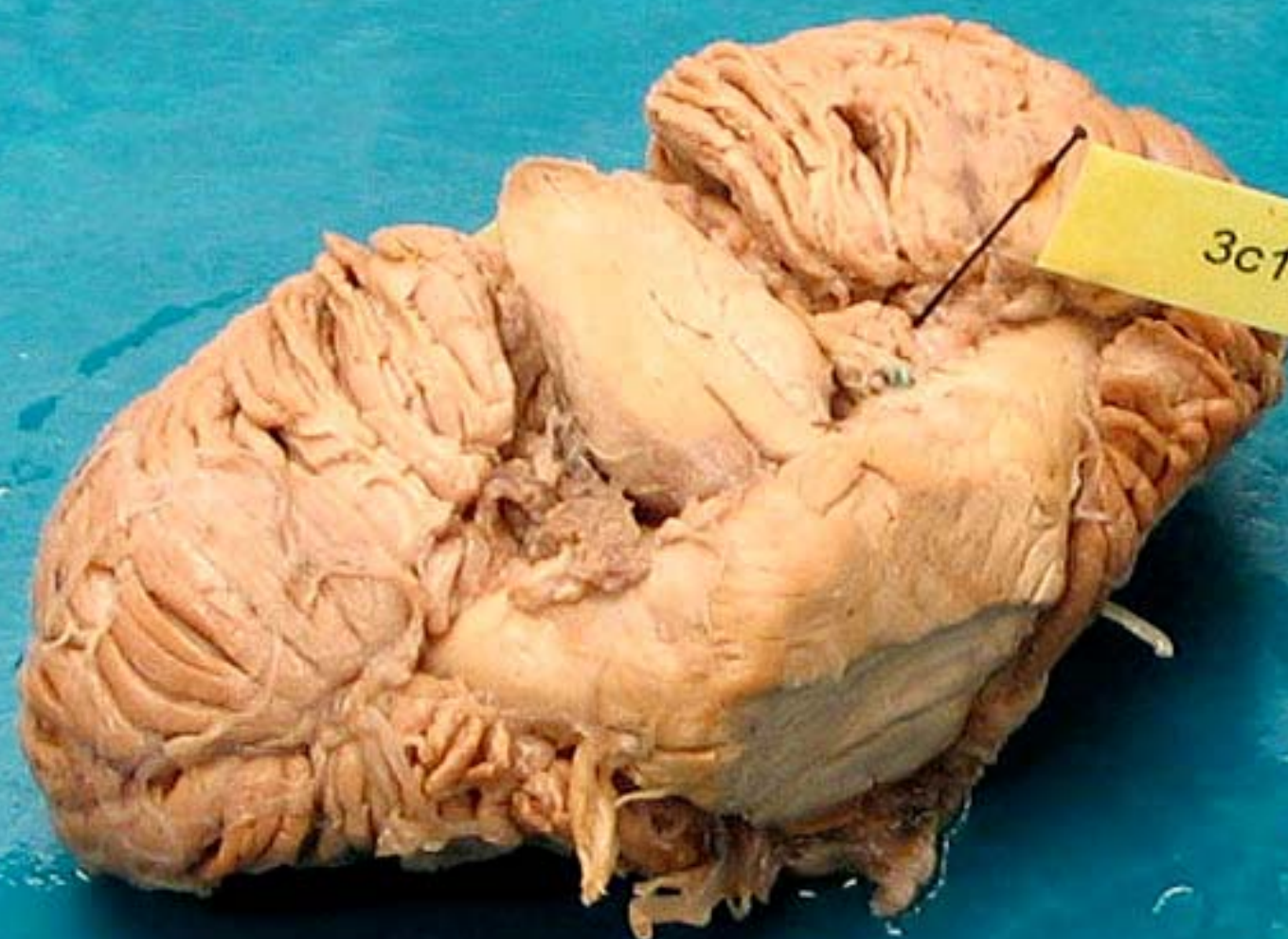
3a. vermis



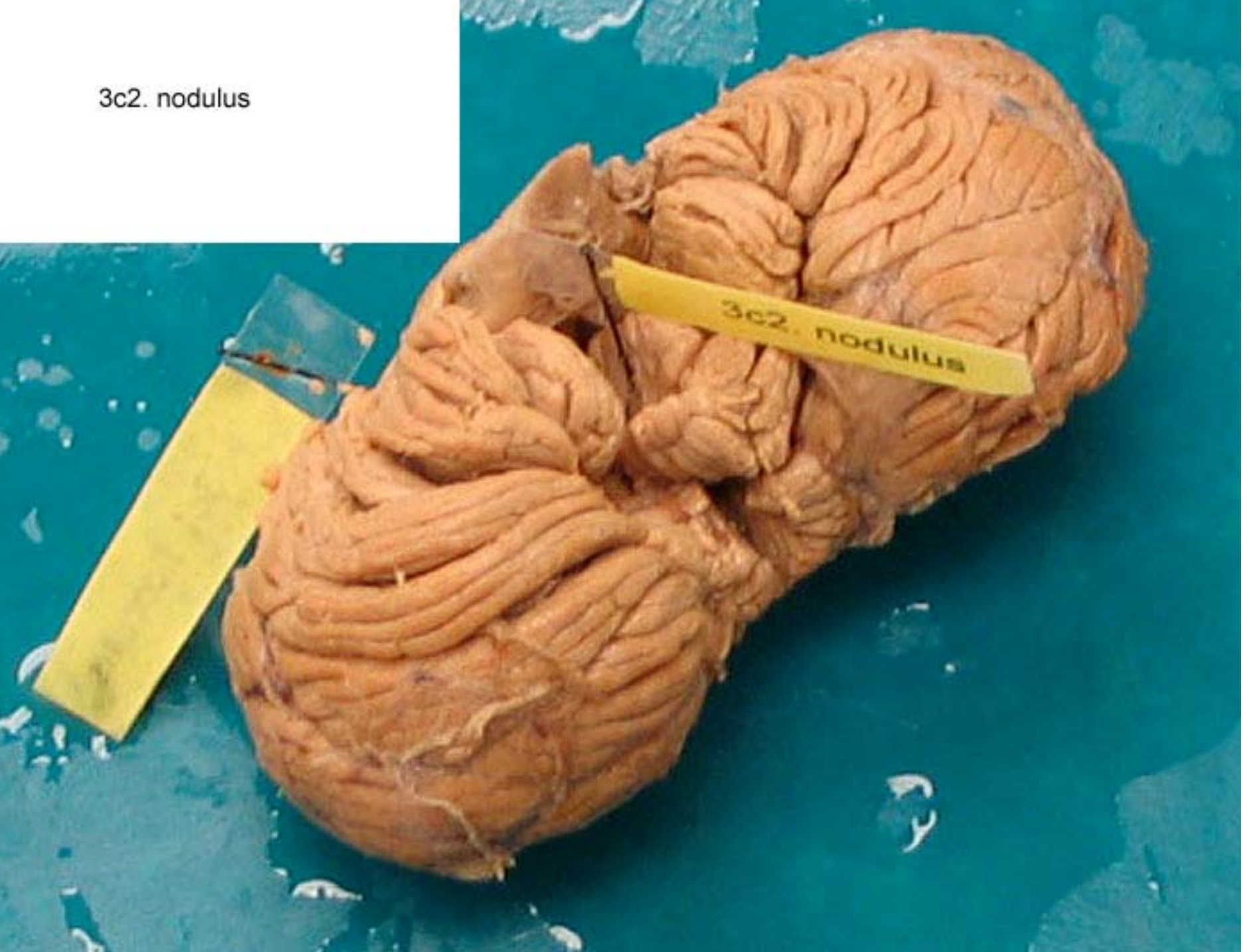


3b. cerebellar hemisphere

This image shows a dissected anatomical specimen of a cerebellar hemisphere. The specimen is a light tan color with a highly folded, gyri-like surface. It is positioned on a blue, textured background. A yellow label with the text "3b. cerebellar hemisphere" is placed over the specimen, with a black line pointing to a specific area on its surface. Another yellow label is visible to the left, and a black line points to a different area on the specimen. The specimen appears to be a section of a larger organ, possibly a brain, with some internal structures visible where it has been cut.



3c2. nodulus

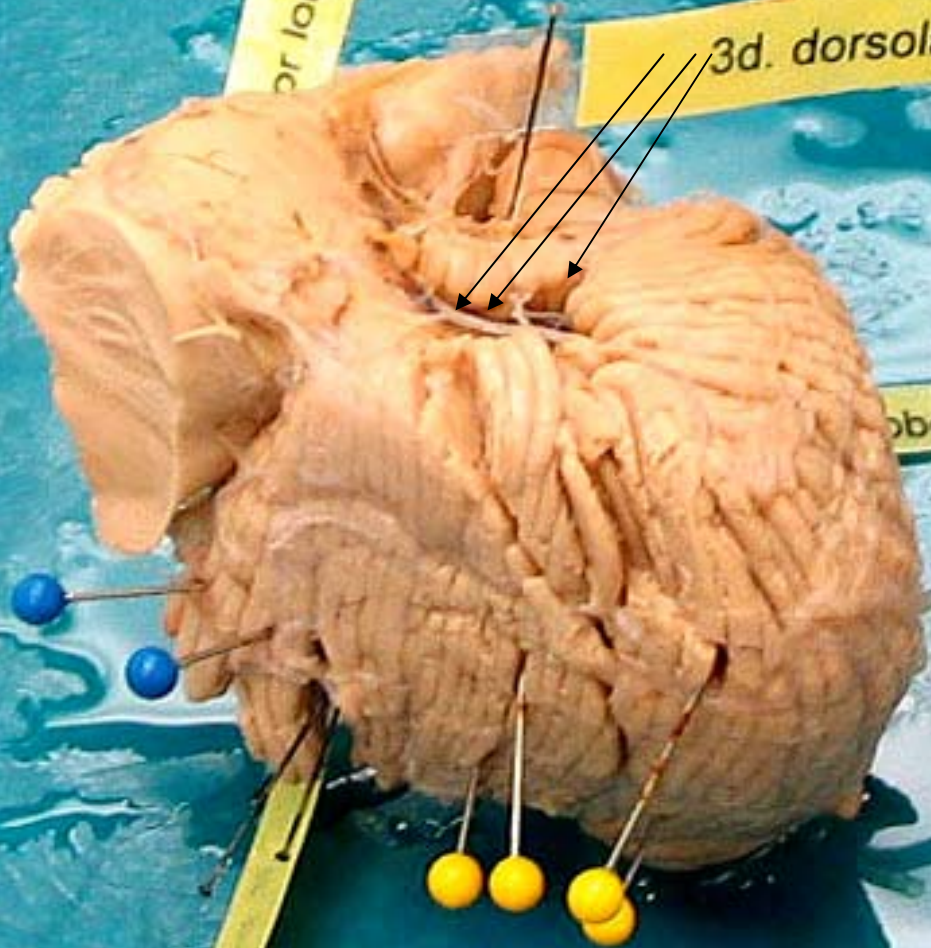




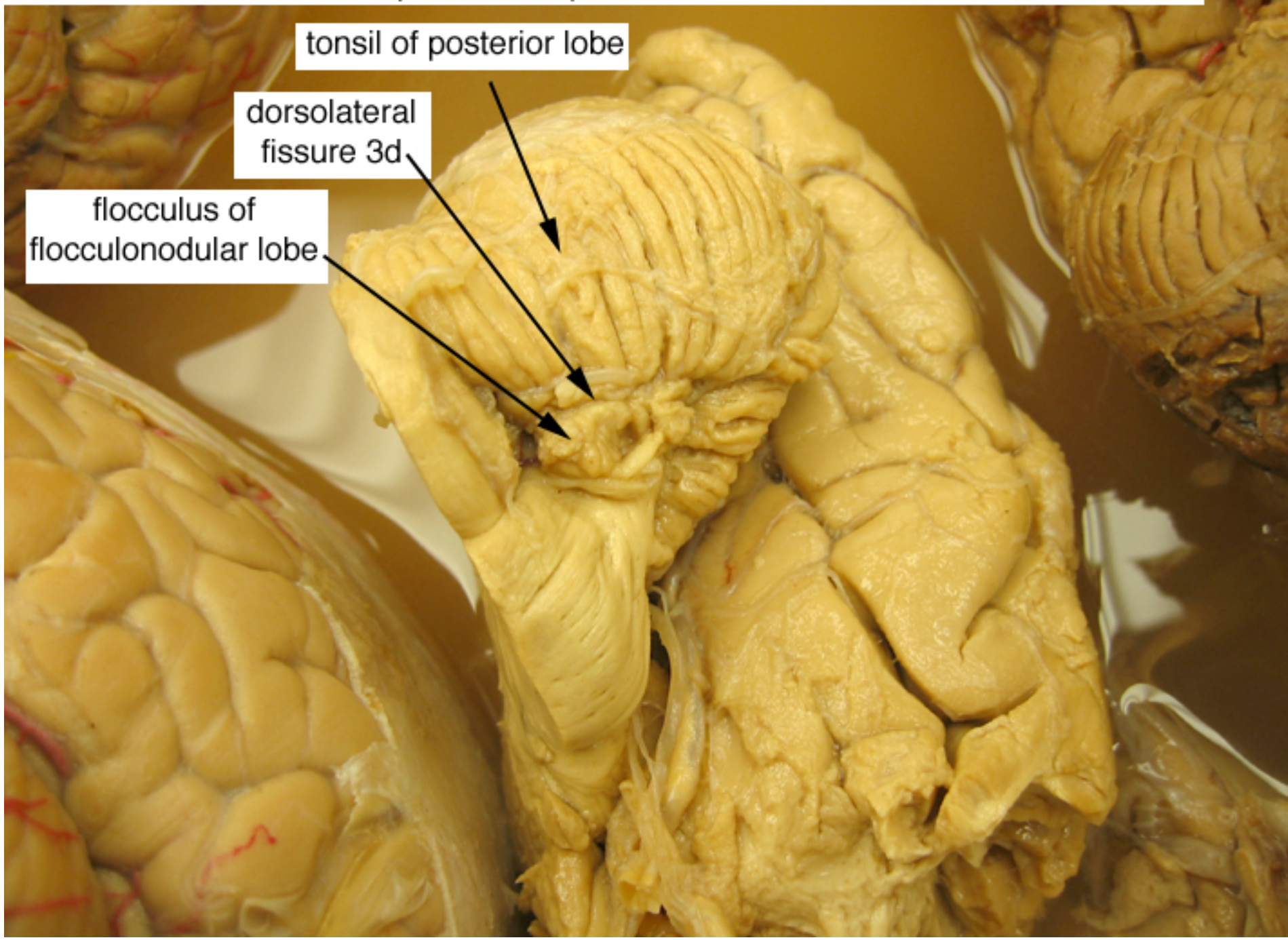
or lobe

3d. dorsolateral fissure

obe



The dorsolateral fissure separates the posterior lobe from the flocculonodular lobe.

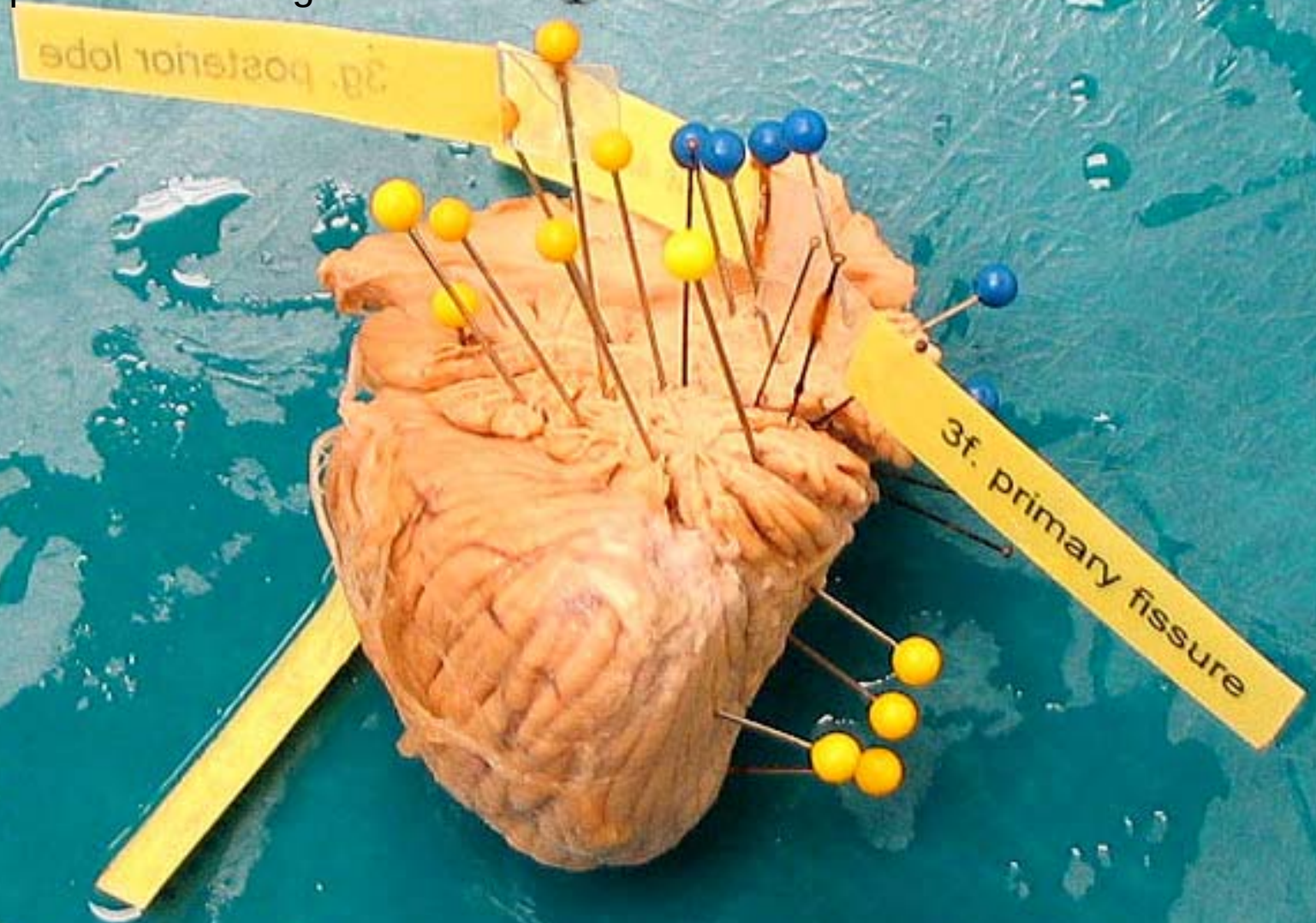


- 3e. anterior lobe

Blue pins: anterior lobe 3e

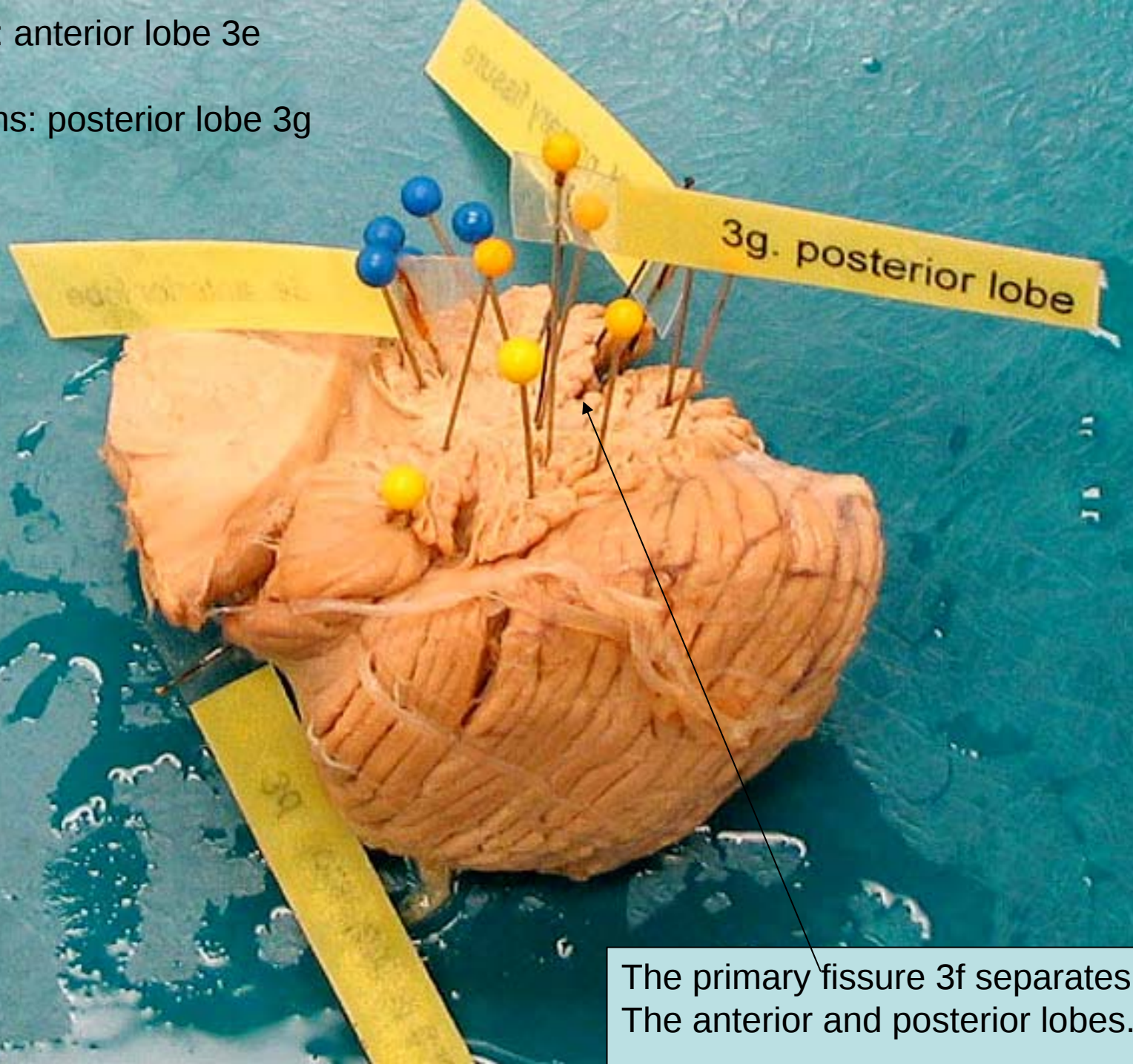
Yellow pins: posterior lobe 3g

The primary fissure separates the anterior and posterior lobes.



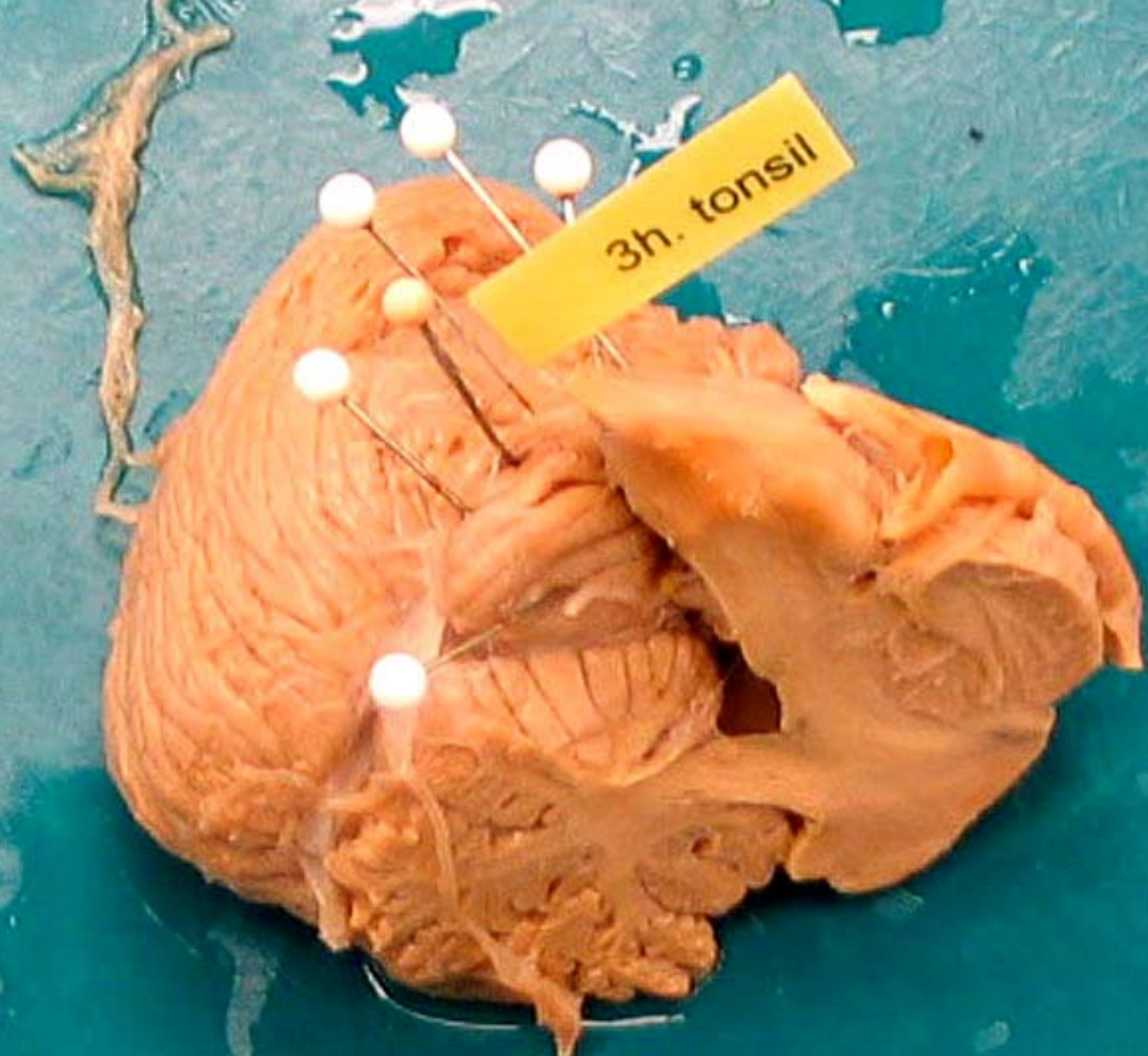
Blue pins: anterior lobe 3e

Yellow pins: posterior lobe 3g

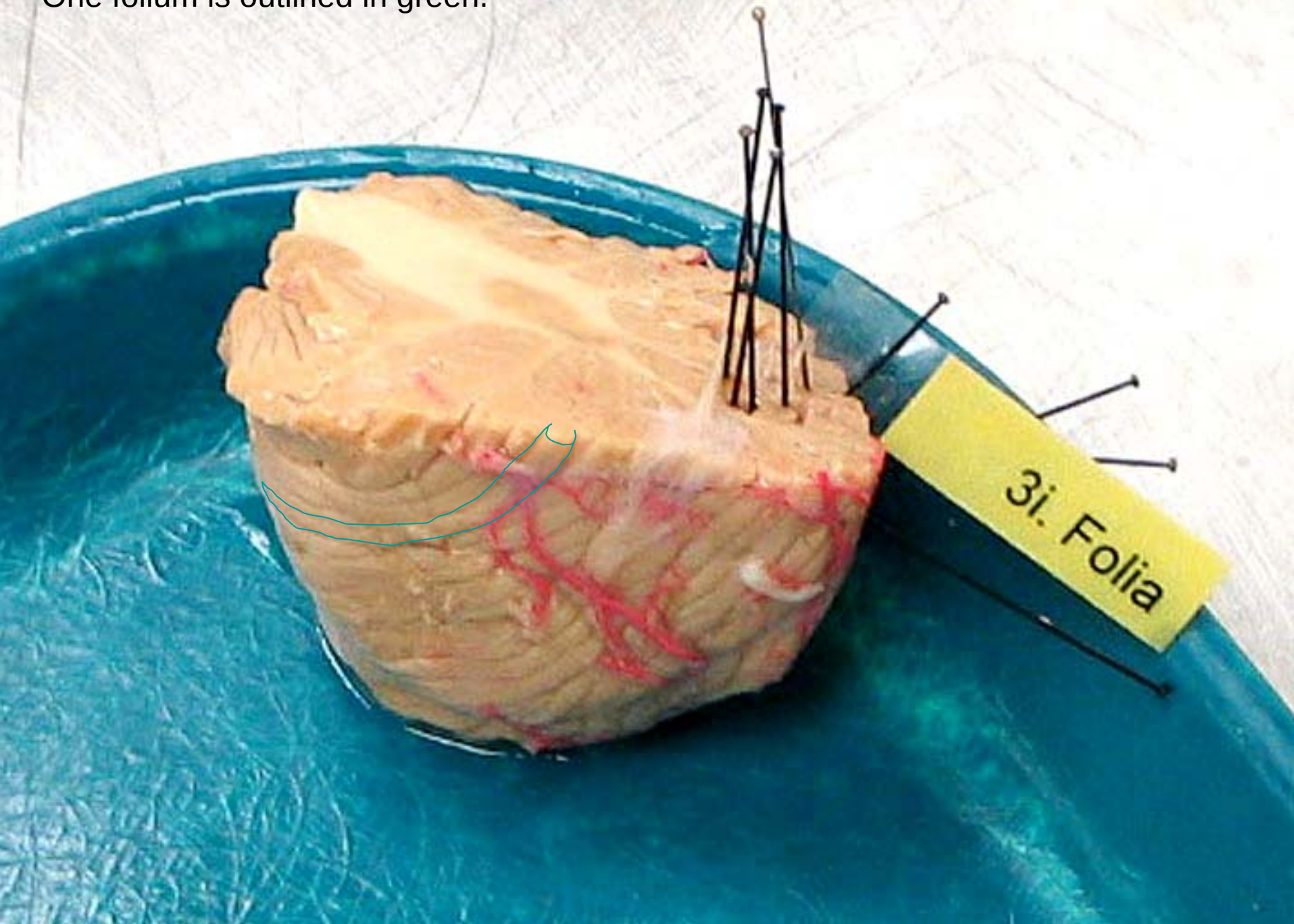


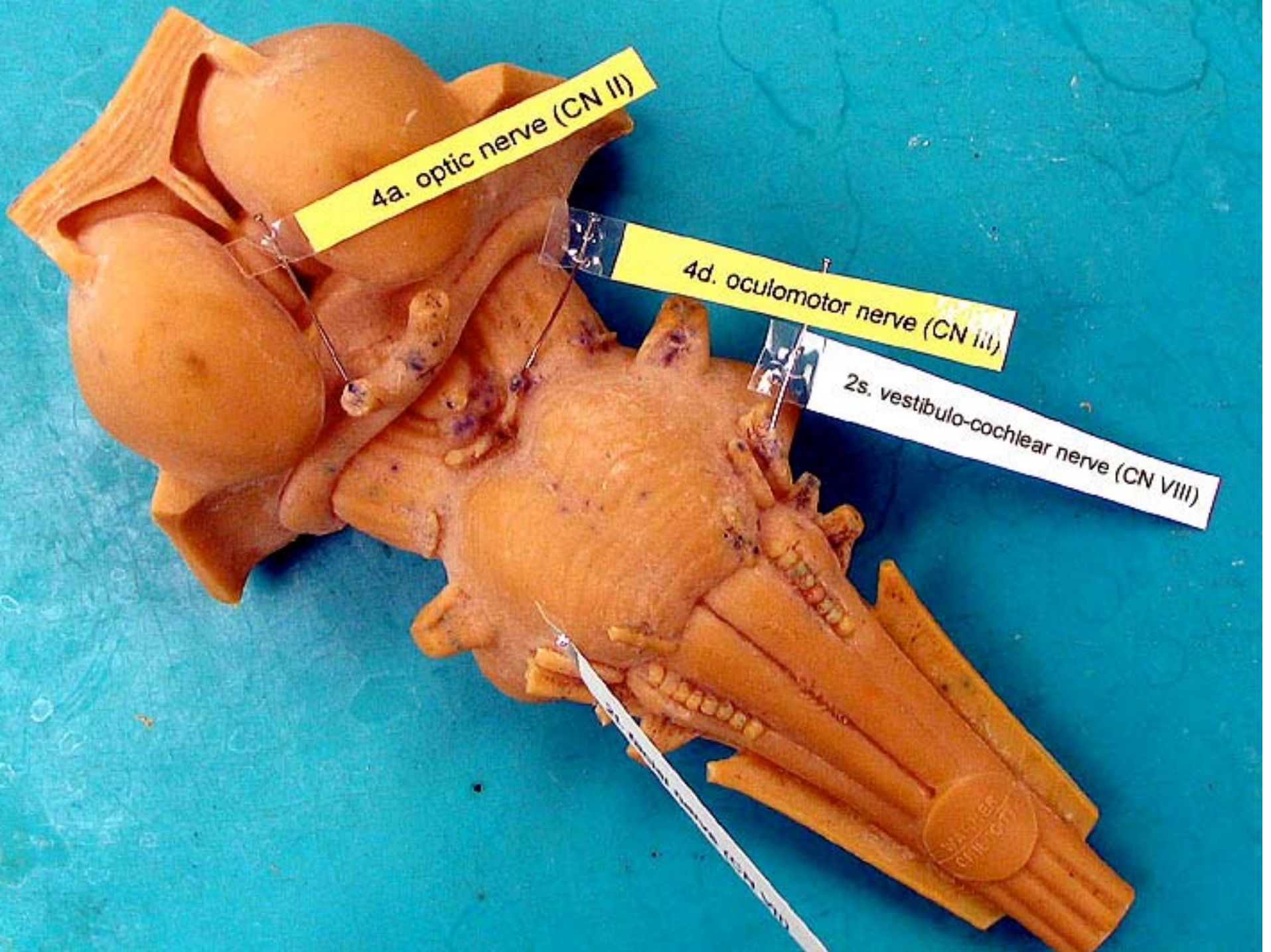
The primary fissure 3f separates
The anterior and posterior lobes.

3h. tonsil



One folium is outlined in green.



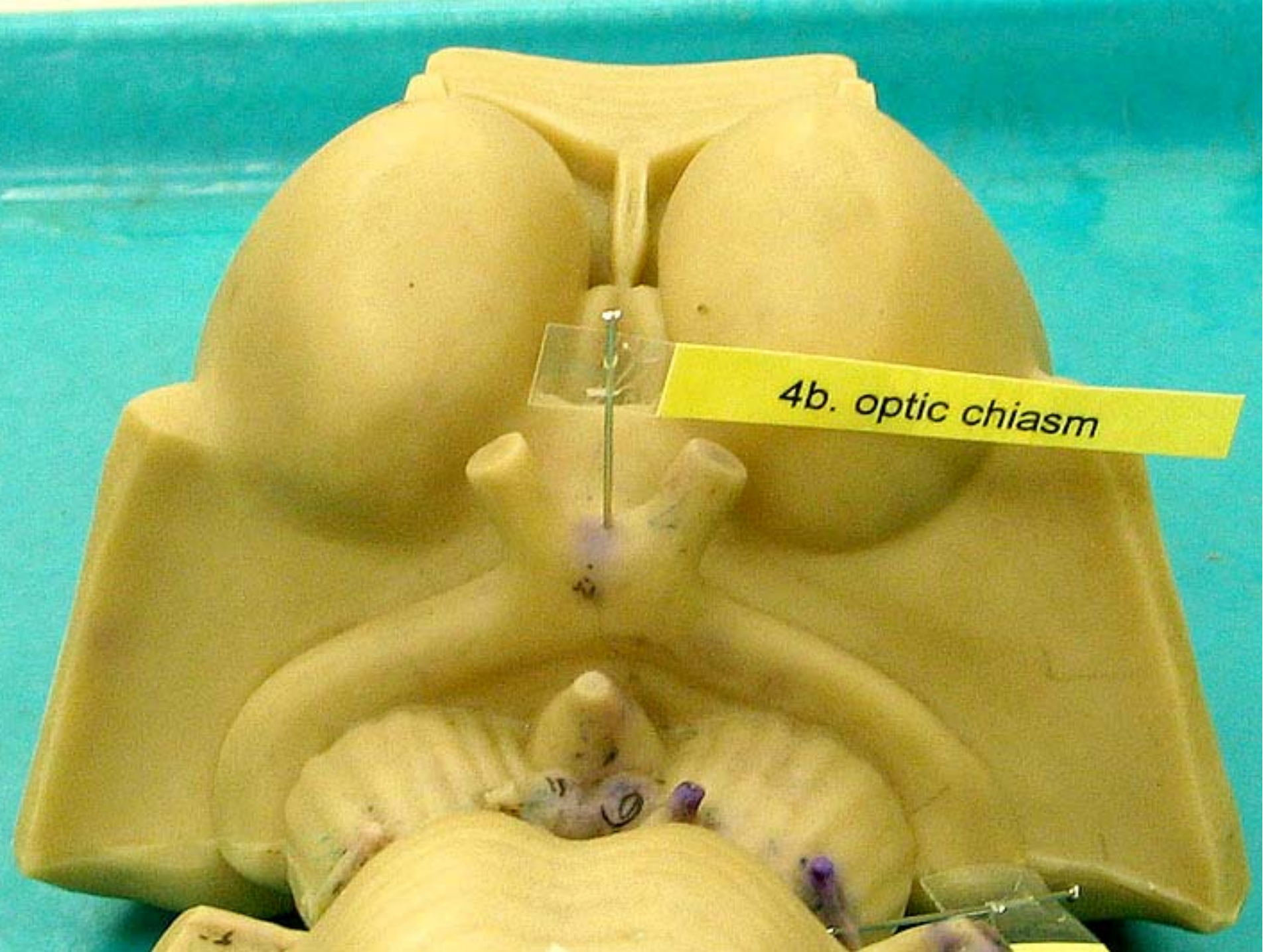


4a. optic nerve (CN II)

4d. oculomotor nerve (CN III)

2s. vestibulo-cochlear nerve (CN VIII)

10. vagus nerve (CN X)



This is a detailed anatomical model of the base of the human brain, specifically focusing on the region of the optic chiasm. The model is made of a light-colored, possibly plastic or wax, material. It shows the two large, rounded optic nerves (labeled '11' and '12') that converge at the optic chiasm, a central point where the nerves cross. The chiasm is located just anterior to the sella turcica, which is the bony structure that houses the pituitary gland. The model is set against a blue background. A yellow label with the text '4b. optic chiasm' is attached to the model with a clear plastic clip. The label is positioned to the right of the chiasm. The model is also marked with other numbers, including '11', '12', and '13', which likely refer to other anatomical structures. The overall shape of the model is roughly triangular, with the base of the brain at the bottom and the optic nerves extending upwards.

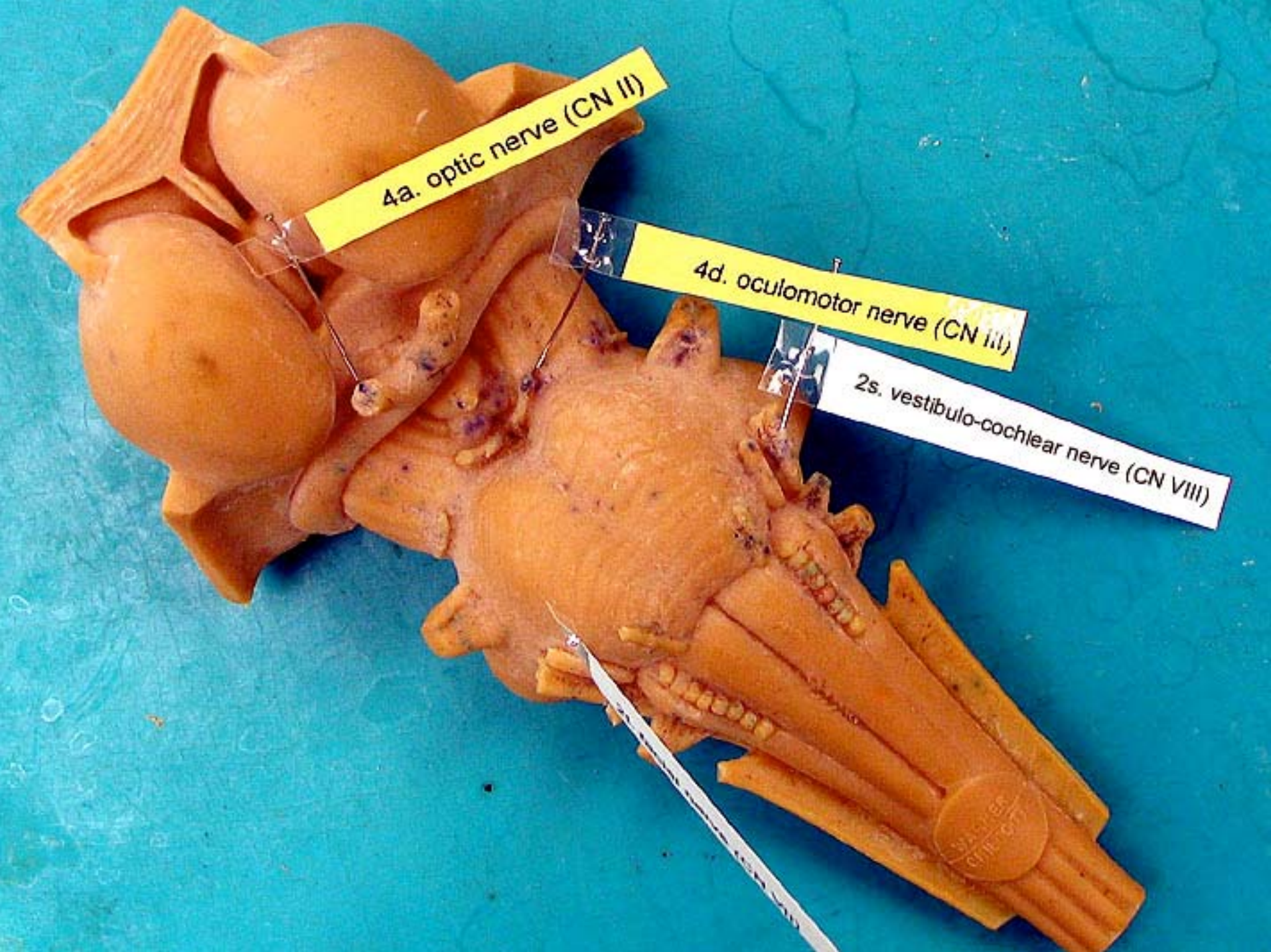
4b. optic chiasm



This image shows a detailed anatomical model of the human brainstem and the roots of the cranial nerves. The brainstem is the central part of the brain, consisting of the midbrain, pons, and medulla oblongata. The cranial nerve roots are shown emerging from the brainstem. The model is color-coded to show different structures: the brainstem is light yellow, the cranial nerve roots are pink, and the surrounding structures are light blue. The model is set against a solid blue background. Two labels with leader lines point to specific structures: a yellow label for the optic tract and a white label for the trigeminal nerve (CN V).

4c. optic tract

2v. trigeminal nerve (CN V)



4a. optic nerve (CN II)

4d. oculomotor nerve (CN III)

2s. vestibulo-cochlear nerve (CN VIII)

1s. vagus nerve (CN X)

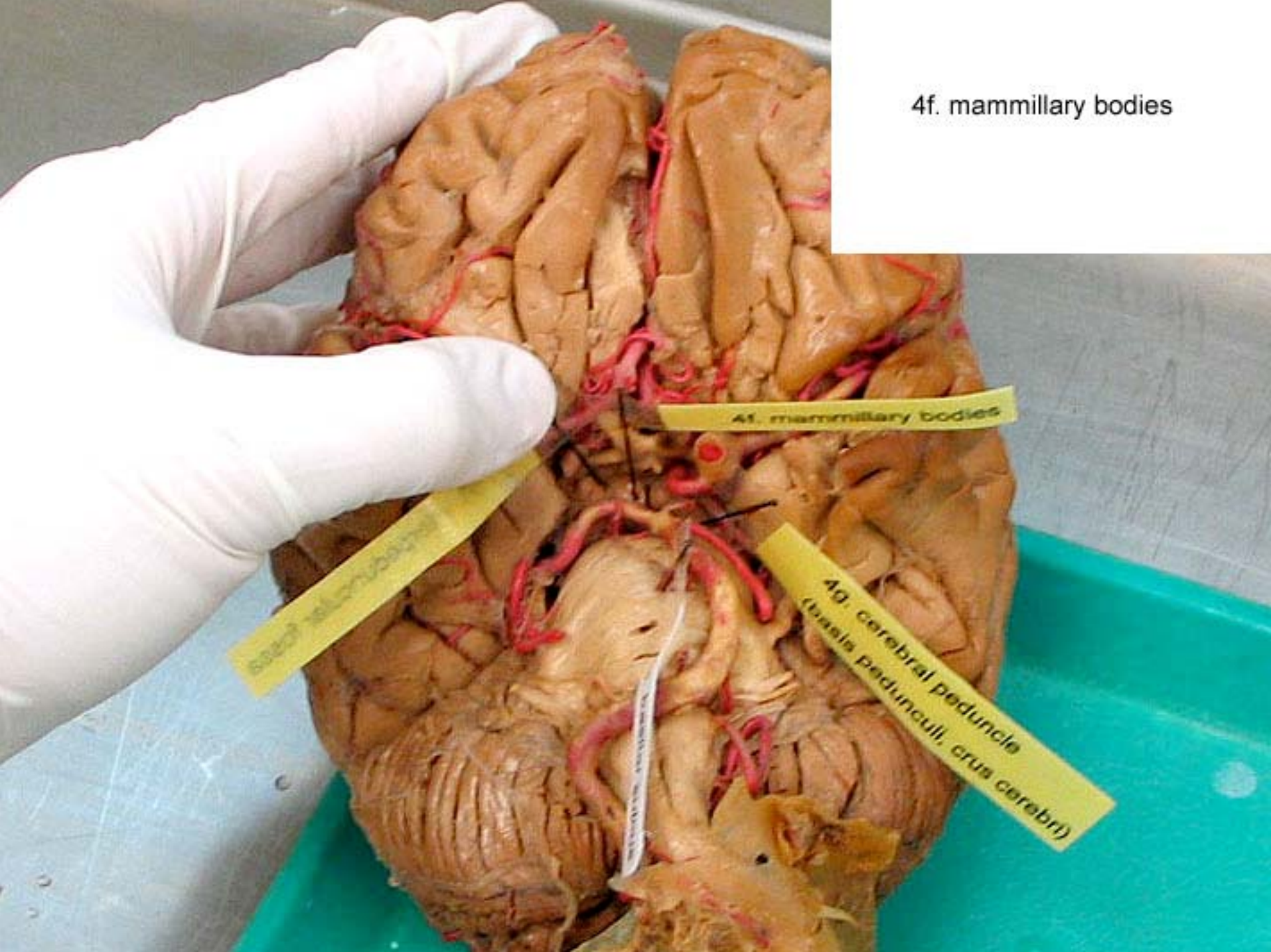


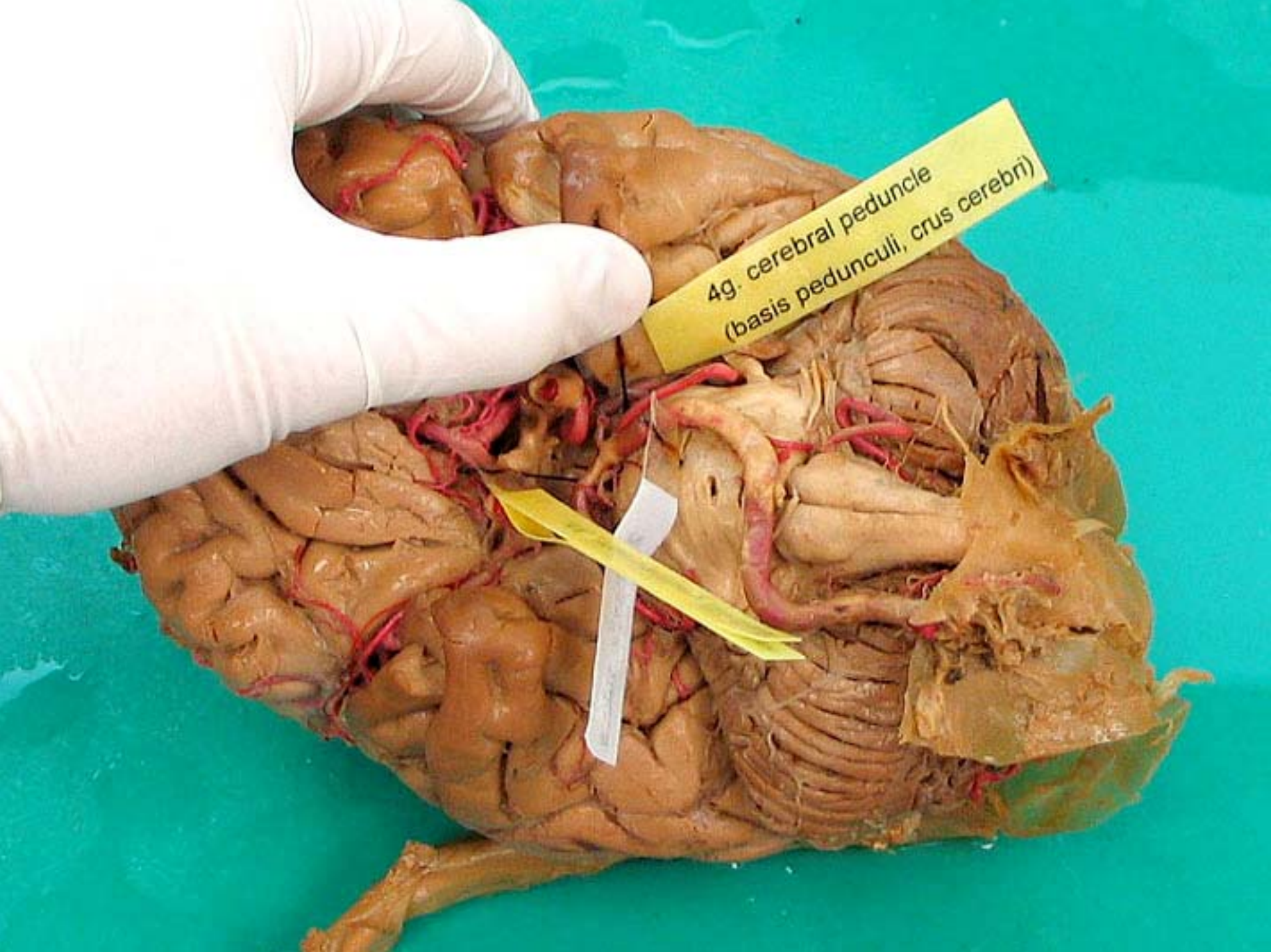
4e. trochlear nerve (CN IV)

2u. abducens nerve (CN VI)

2p. accessory nerve (CN XI)

4f. mammillary bodies





A photograph of a human brain specimen, specifically the posterior view showing the cerebellum and brainstem. A gloved hand is holding a yellow label that reads "4g. cerebral peduncle (basis pedunculi, crus cerebri)". Another yellow label is visible on the left side of the brainstem, and a white label is partially visible in the center. The brain is resting on a teal surface.

4g. cerebral peduncle
(basis pedunculi, crus cerebri)

4b. optic

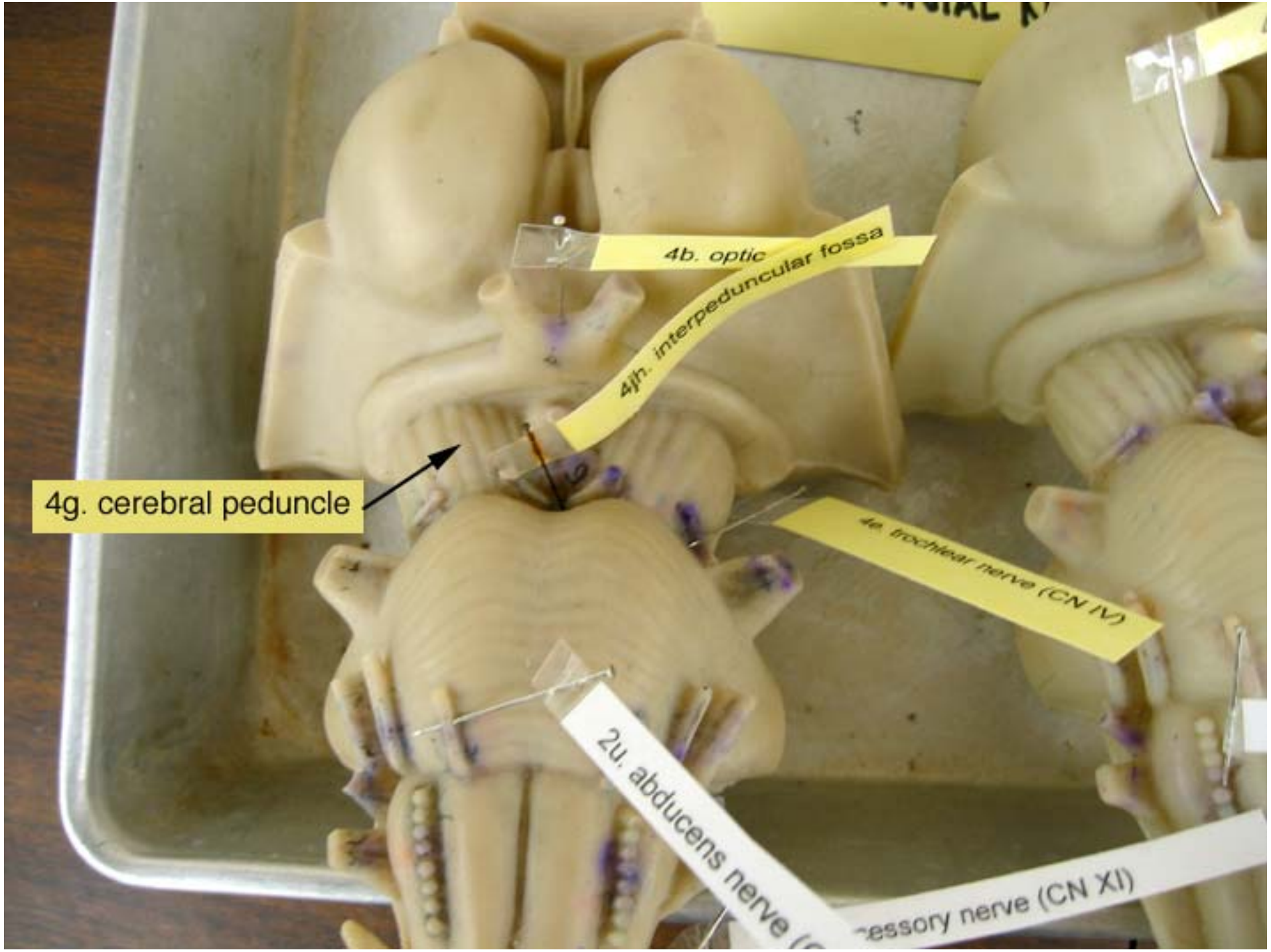
4jh. interpeduncular fossa

4g. cerebral peduncle

4e. trochlear nerve (CN IV)

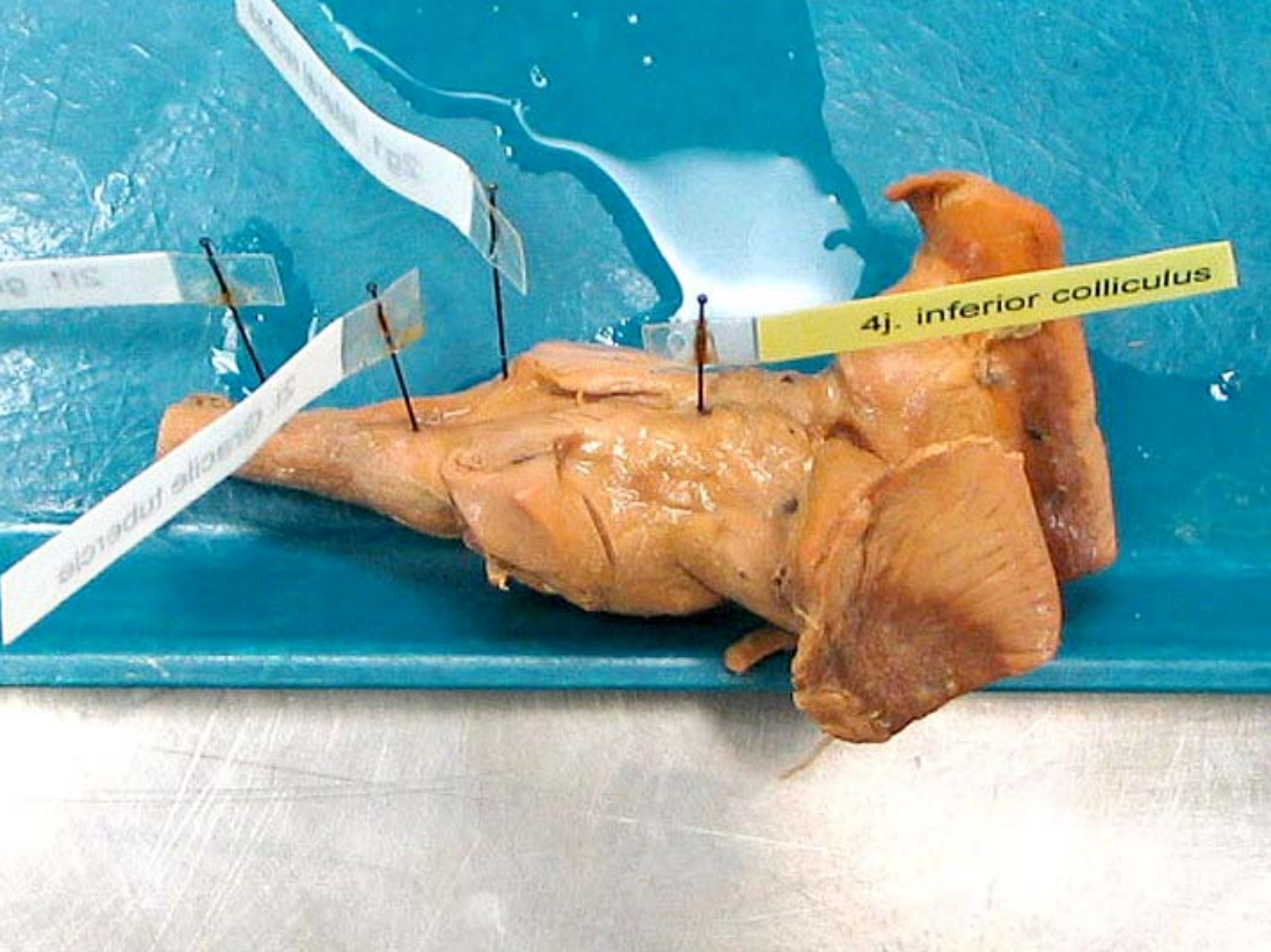
2u. abducens nerve

cessory nerve (CN XI)



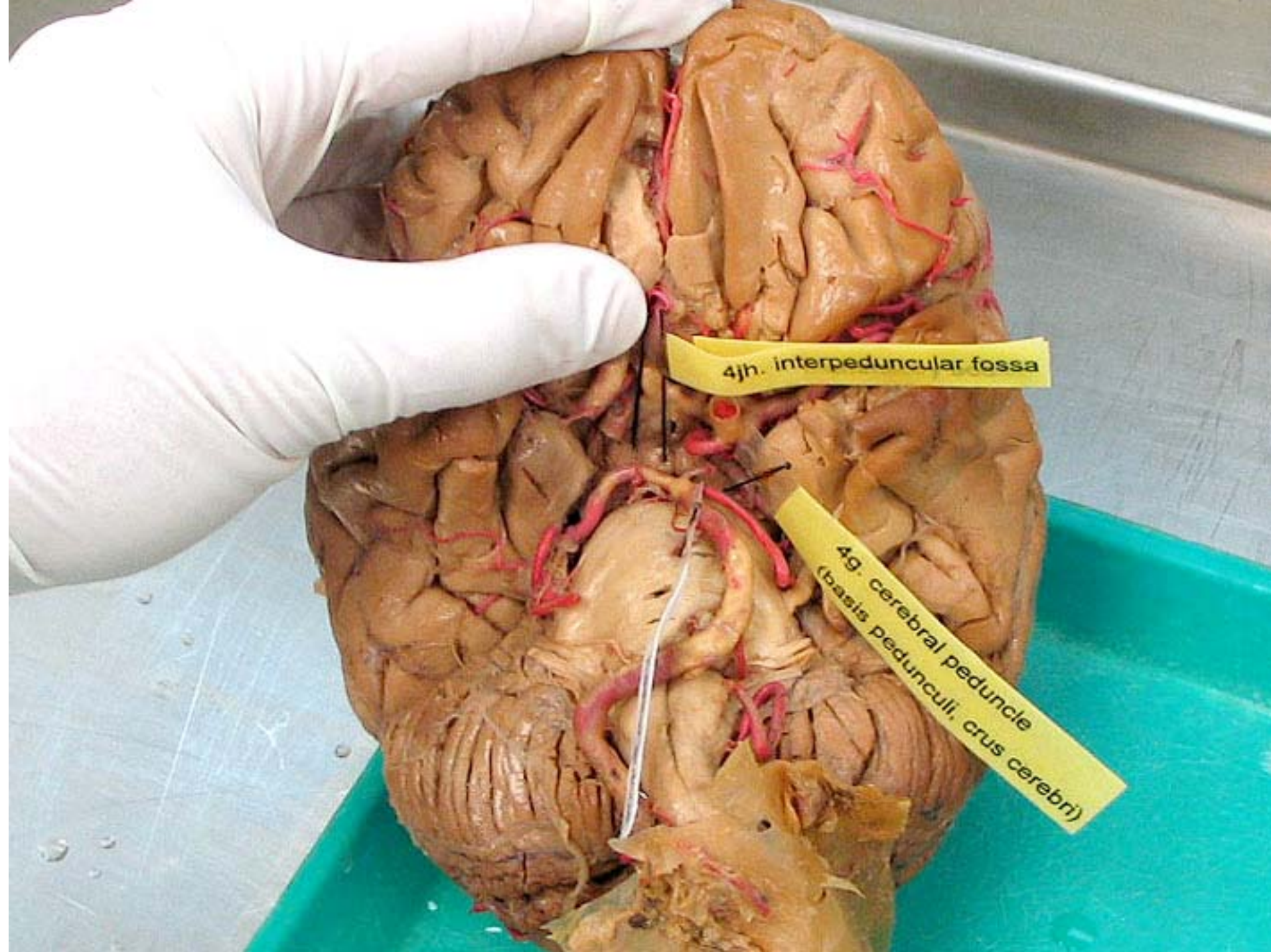
4i. superior colliculus





4j. inferior colliculus

St. Ovariole tubercle



4jh. interpeduncular fossa

4g. cerebral peduncle
(basis pedunculi, crus cerebri)

4b. optic

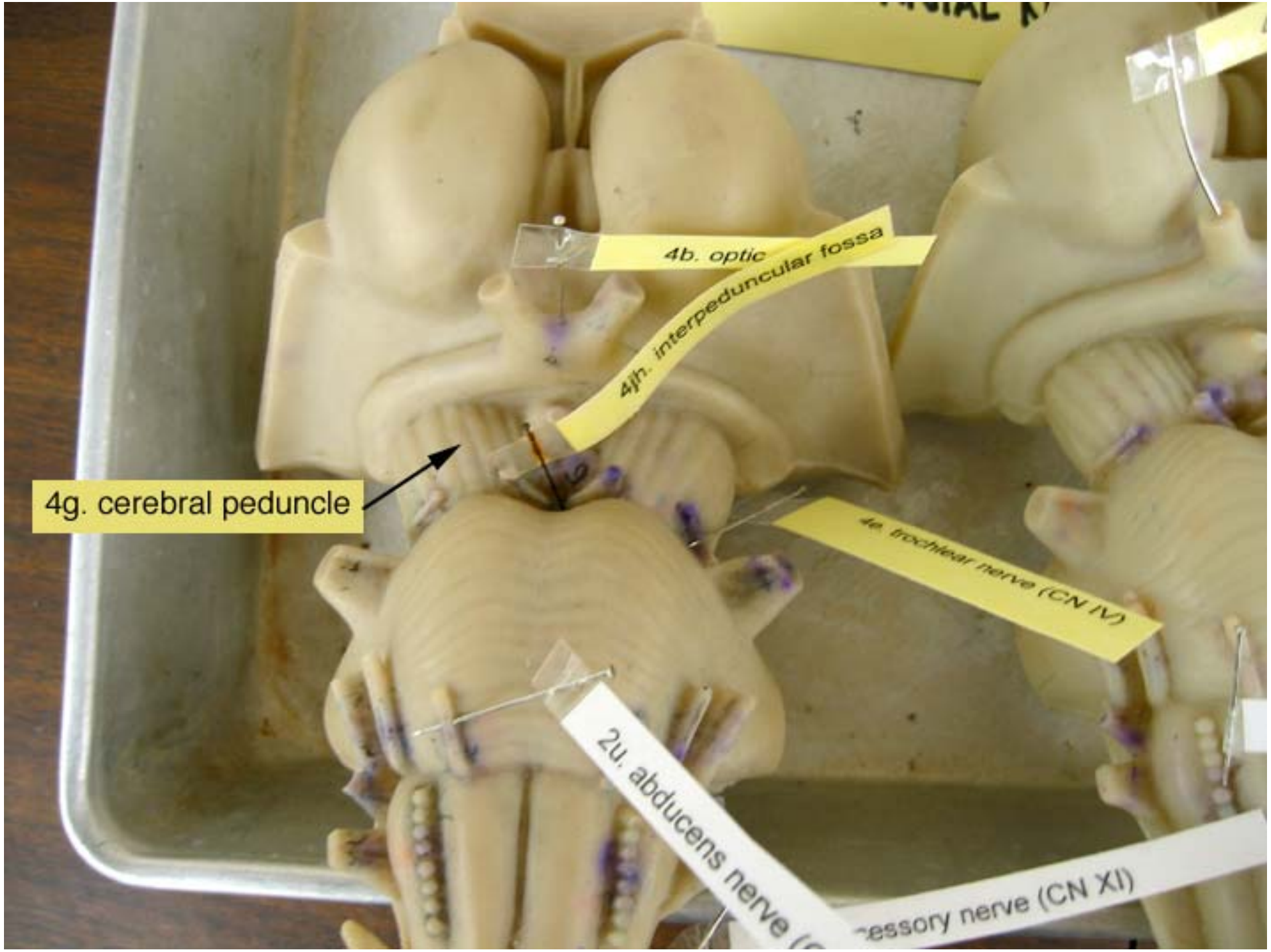
4jh. interpeduncular fossa

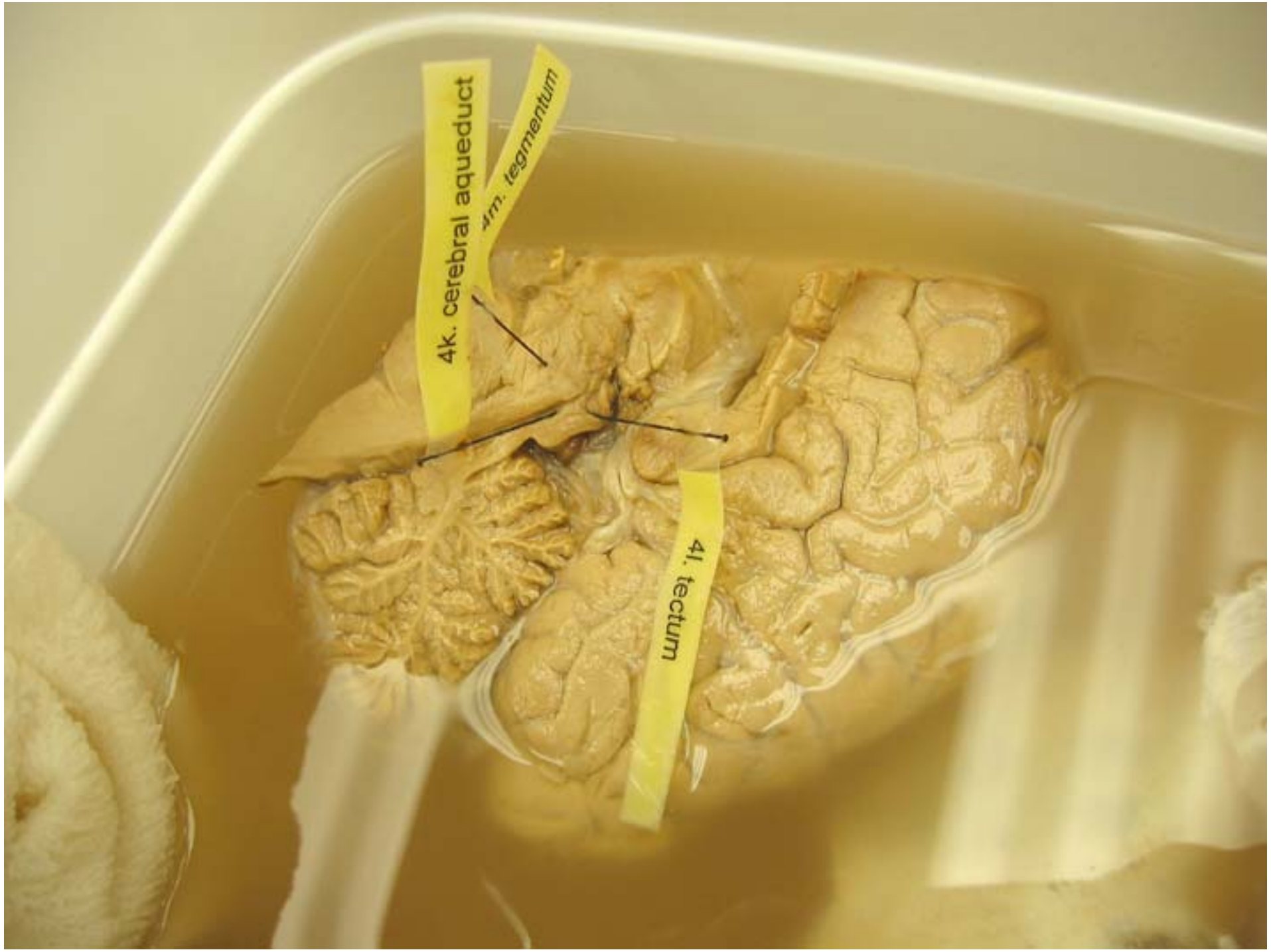
4g. cerebral peduncle

4e. trochlear nerve (CN IV)

2u. abducens nerve

cessory nerve (CN XI)

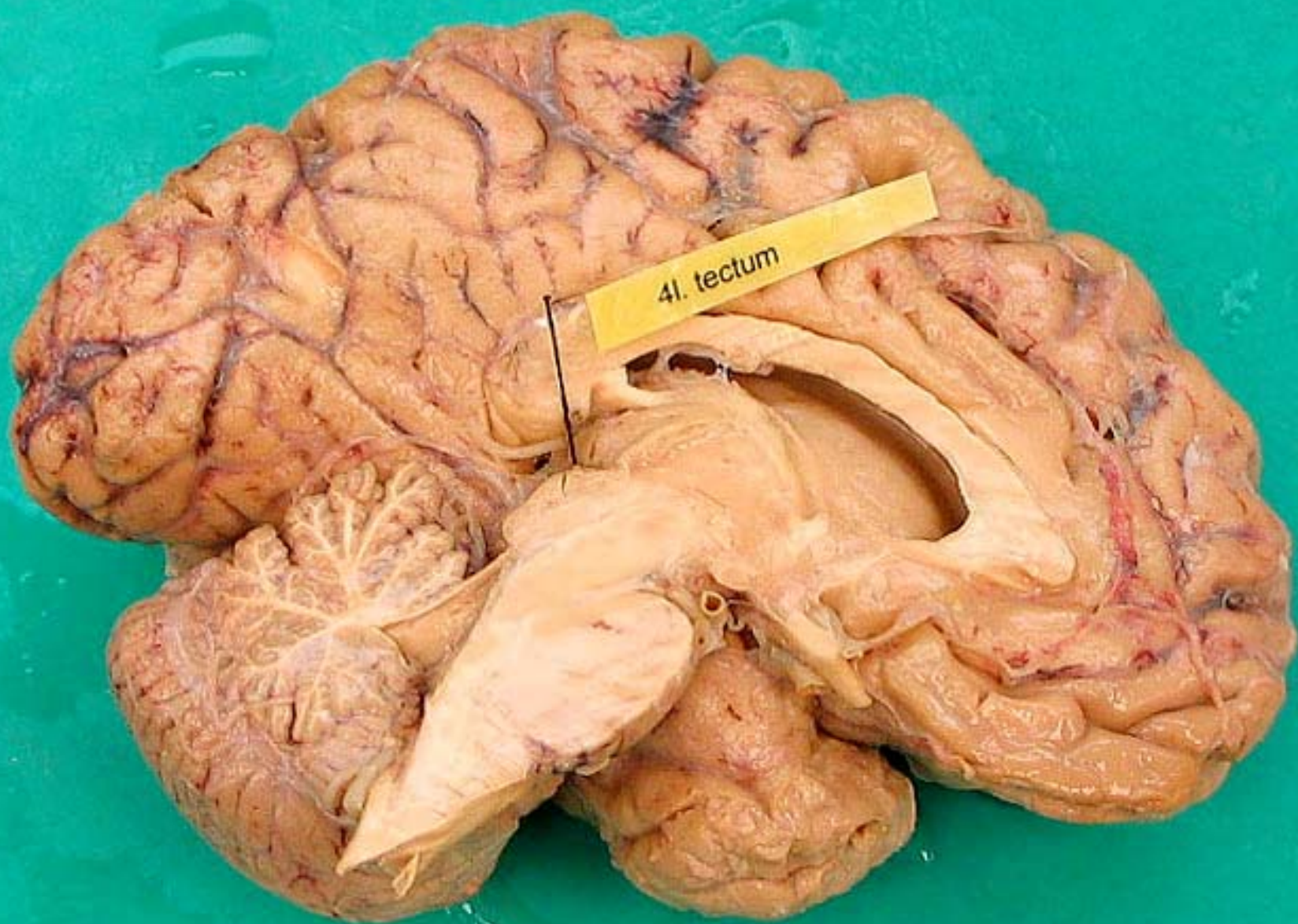


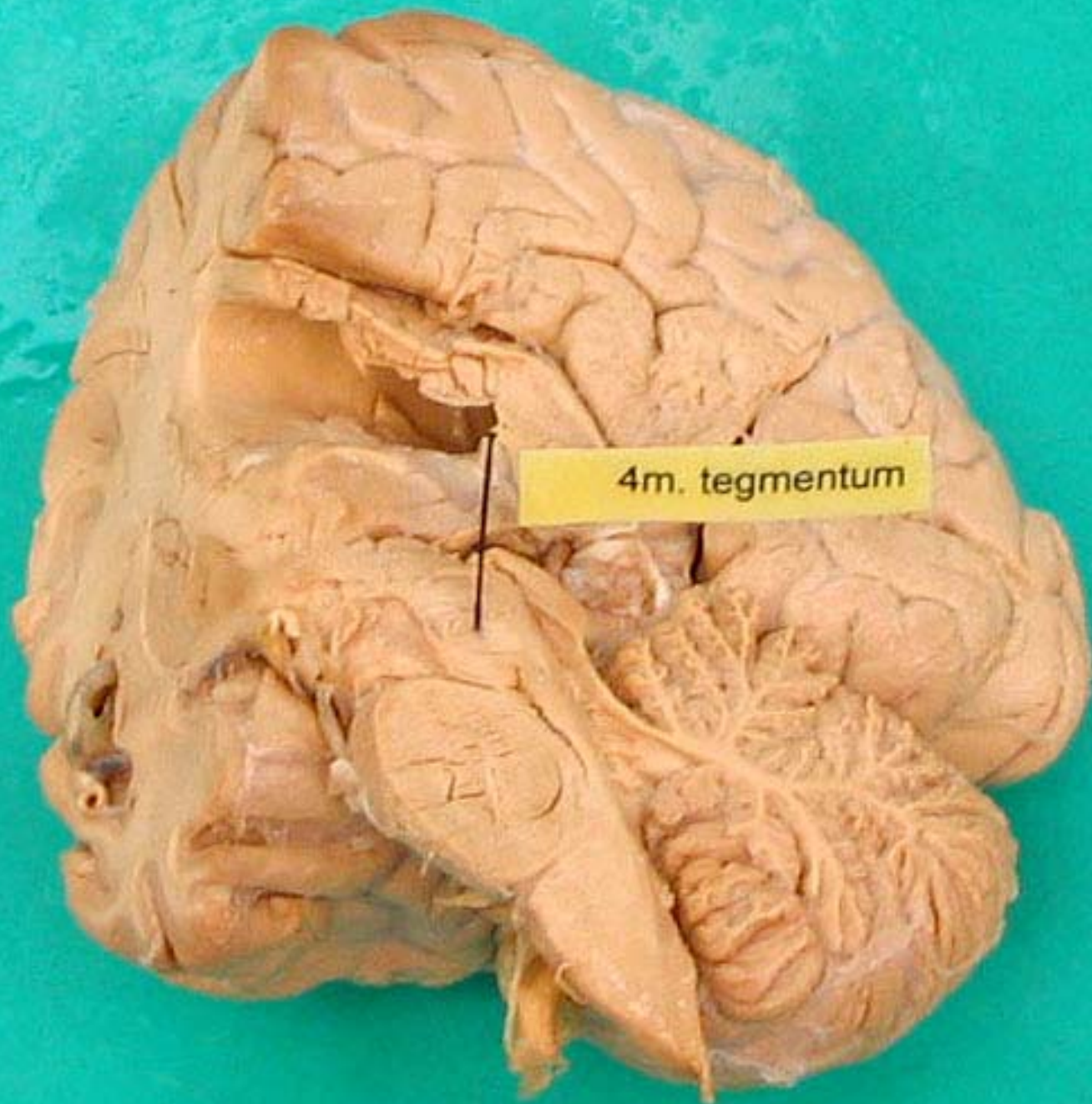


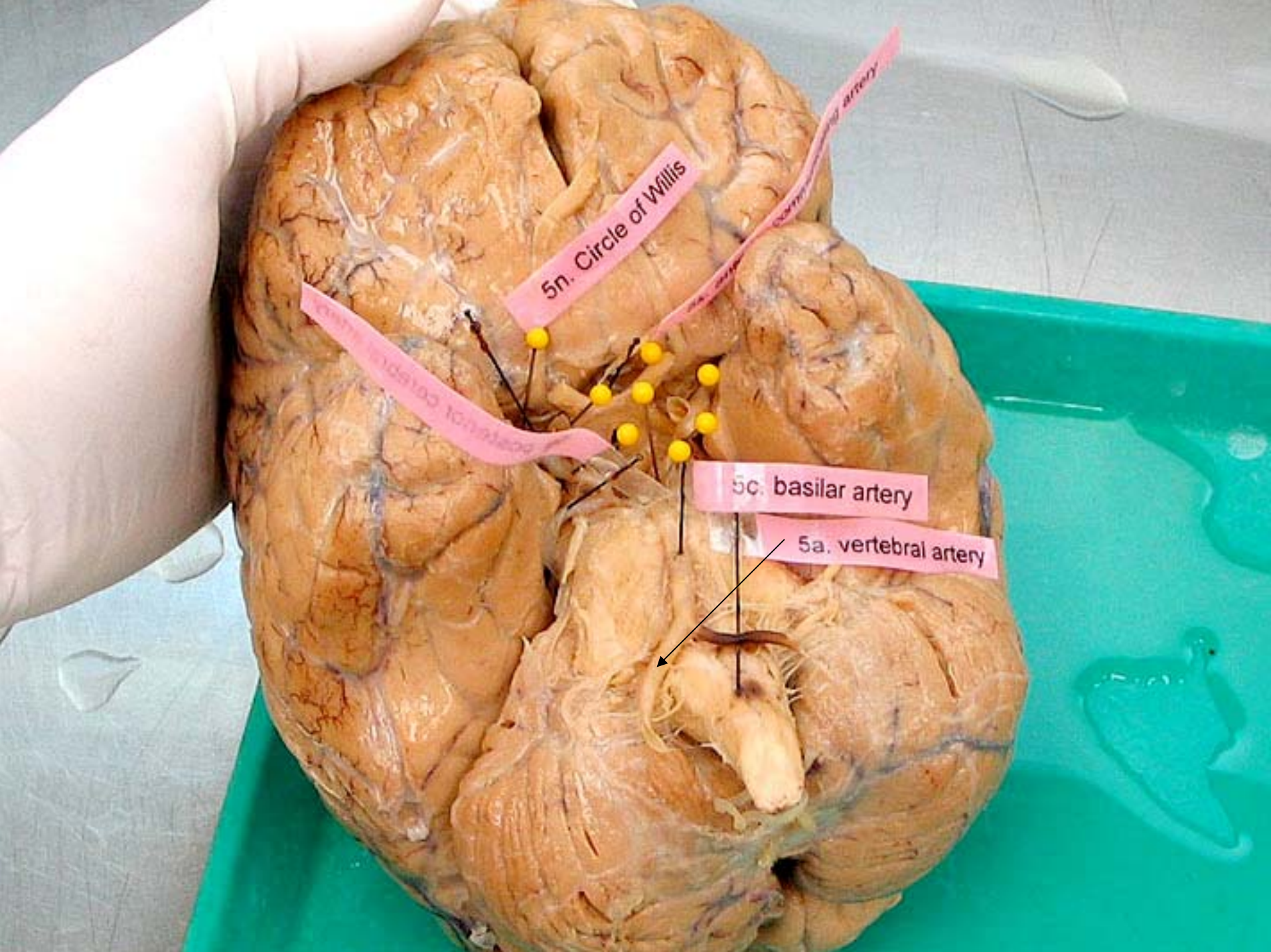
4k. cerebral aqueduct

4m. tegmentum

4l. tectum



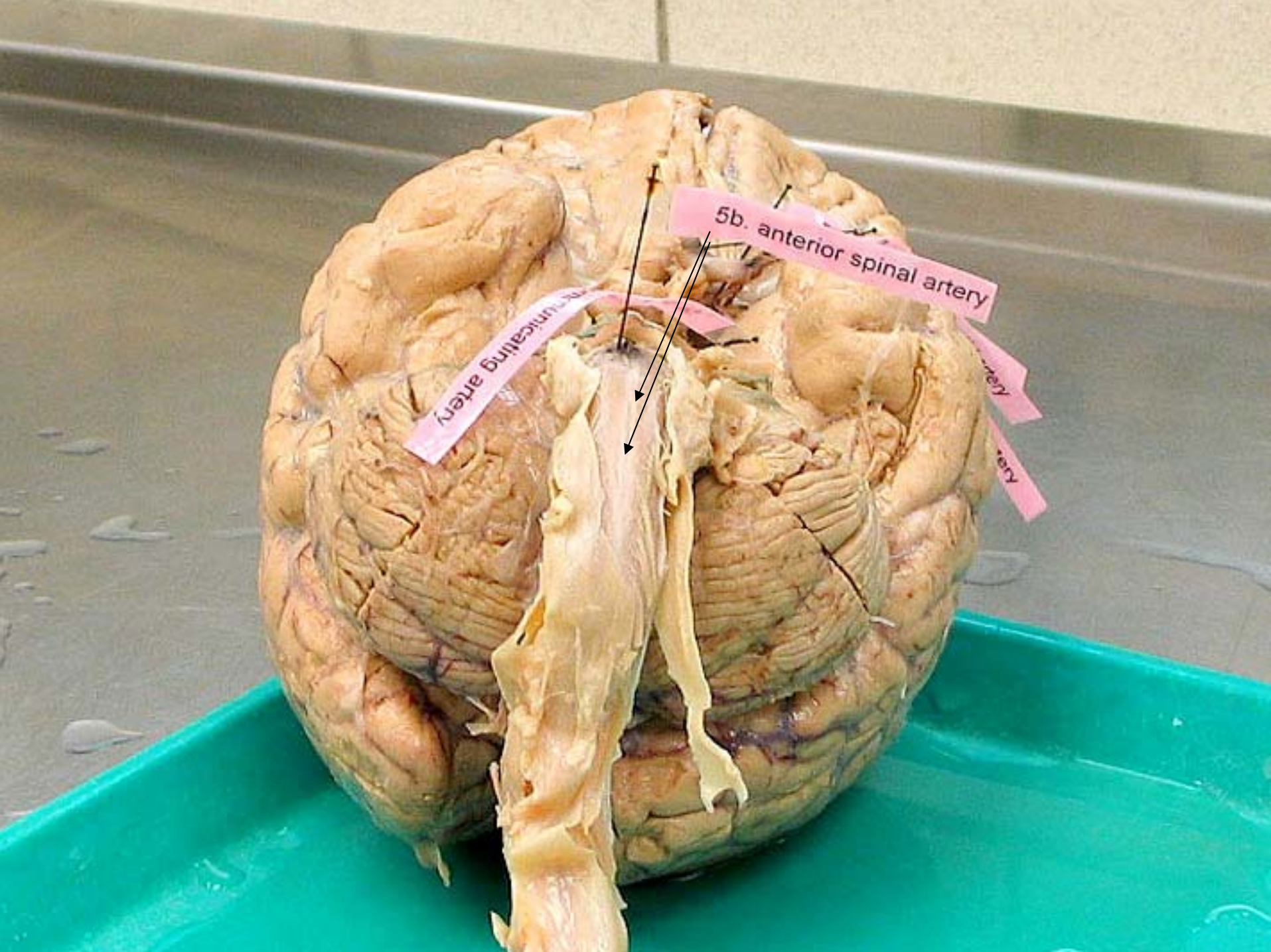




5n. Circle of Willis

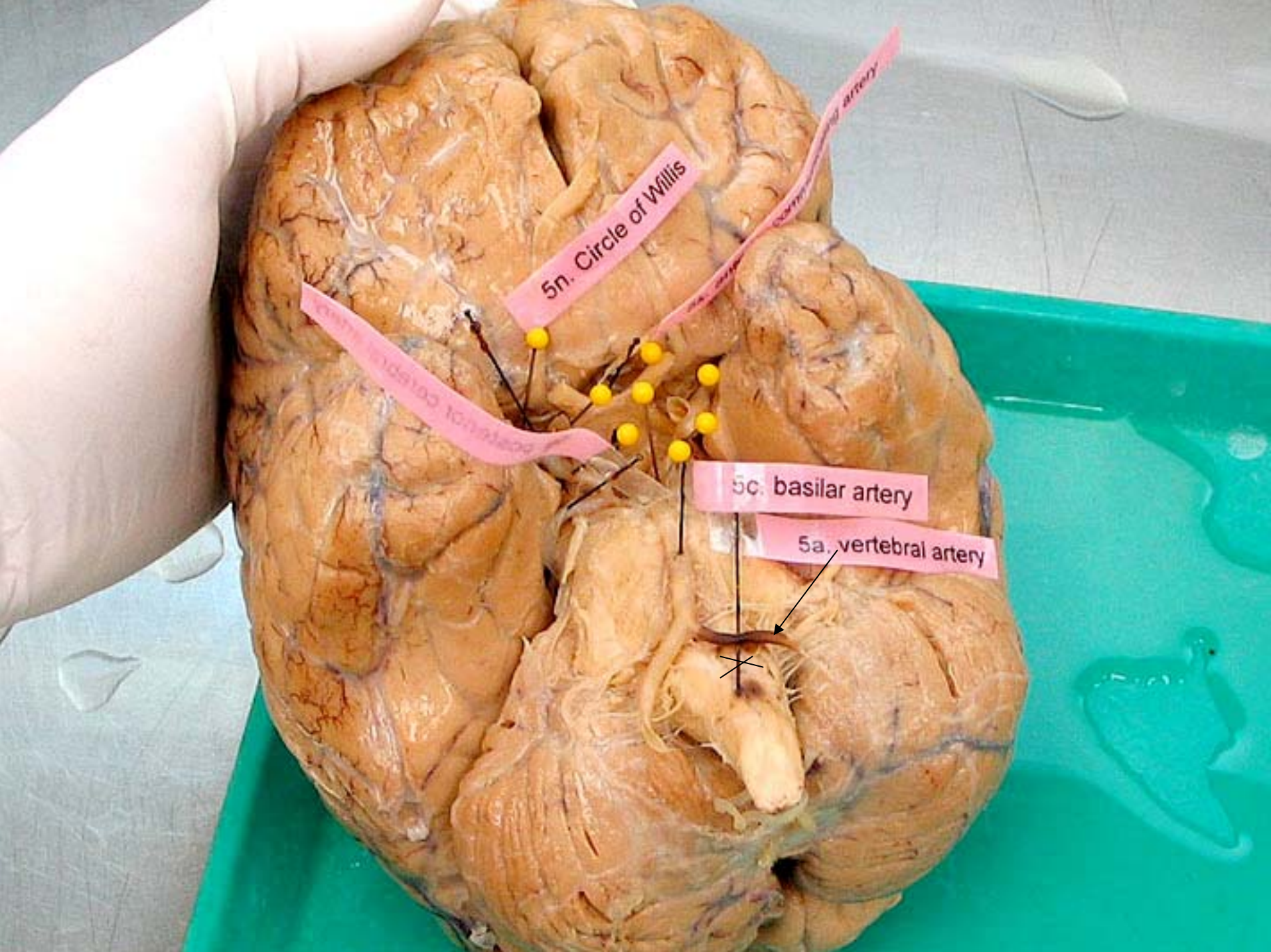
5c. basilar artery

5a. vertebral artery



communicating artery

5b. anterior spinal artery





5n. Circle of Willis

5c. basilar artery

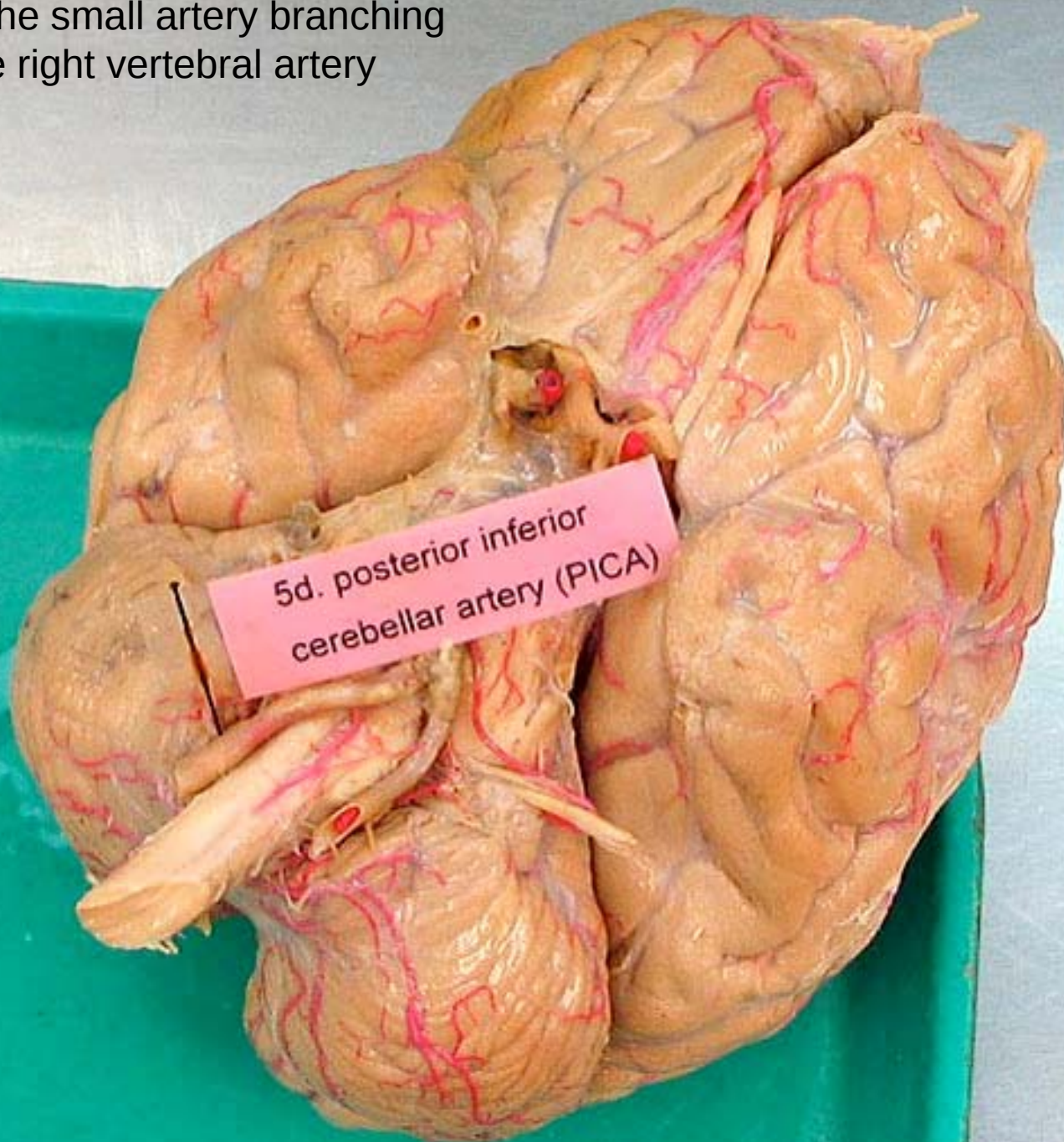
5a. venous sinus system

5b. venous sinus system

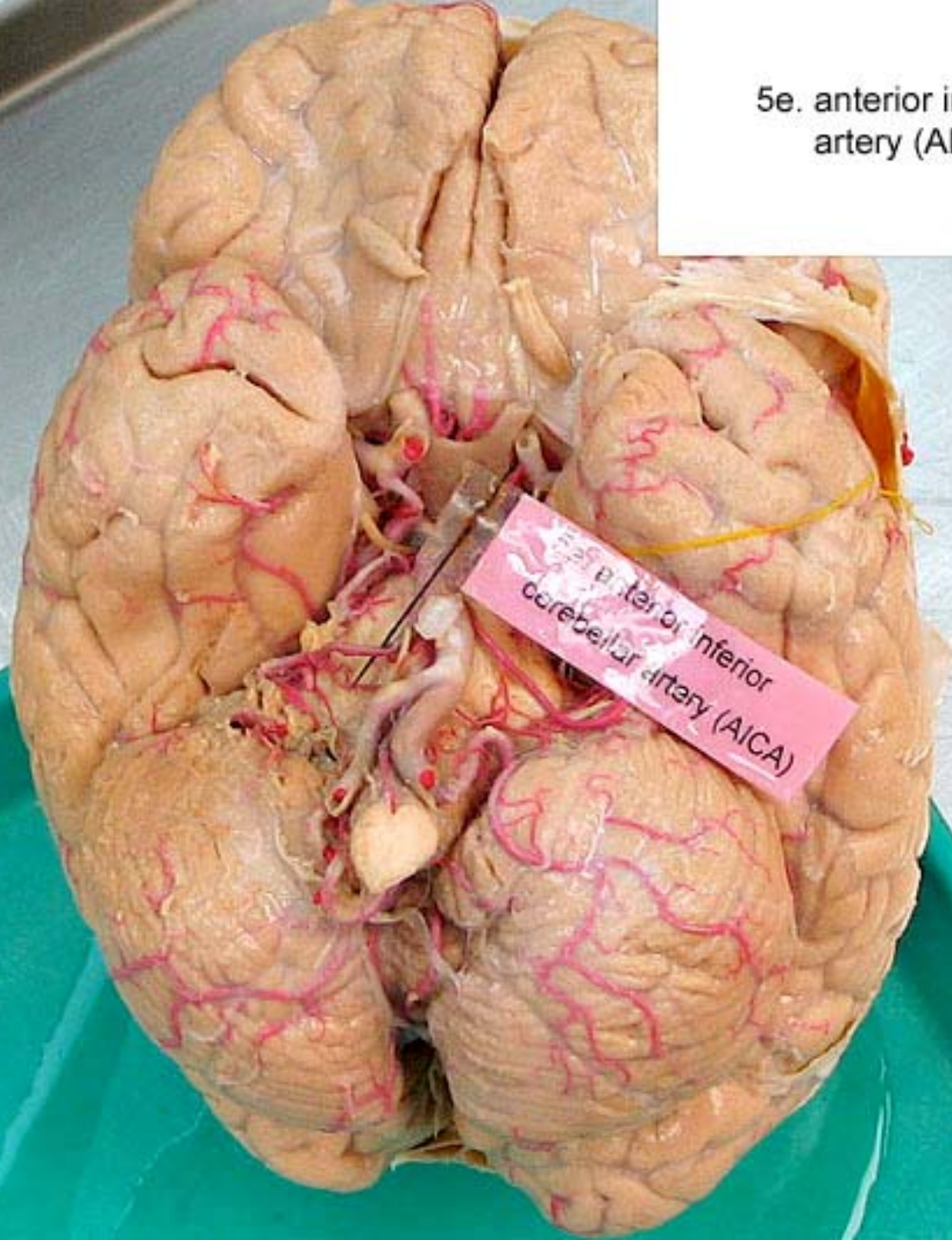
5a. venous sinus system

5b. venous sinus system

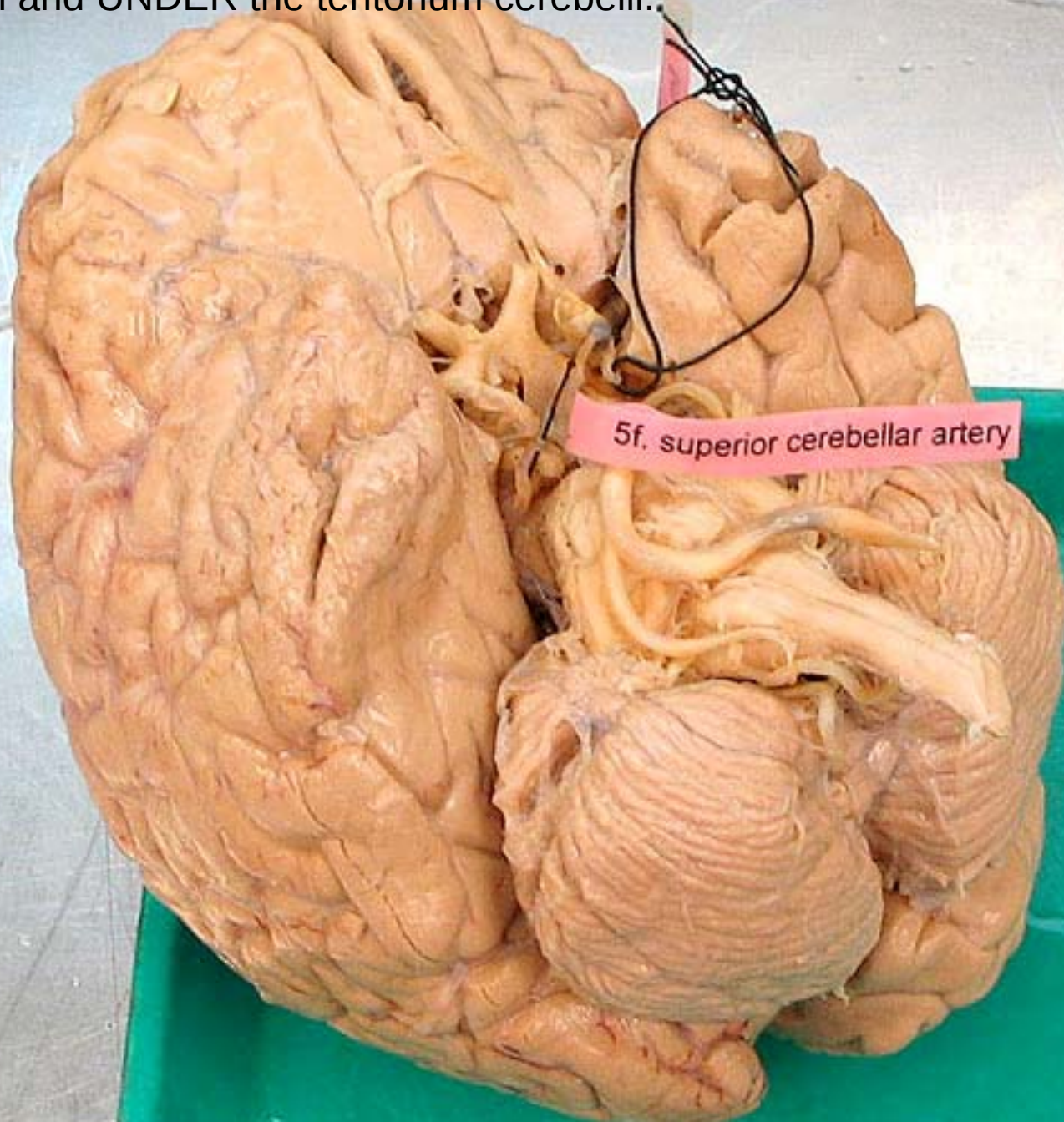
PICA is the small artery branching out of the right vertebral artery

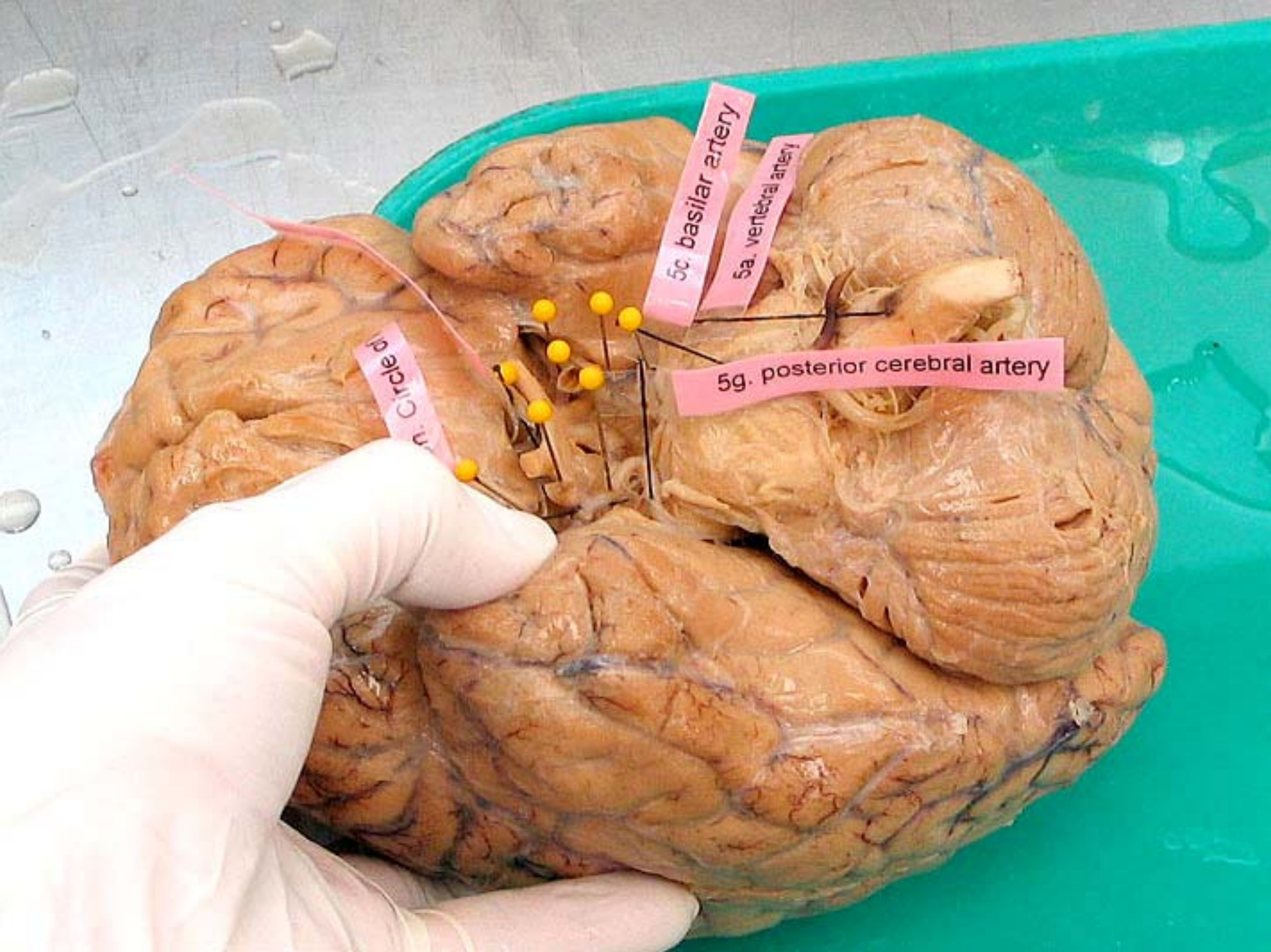


5e. anterior inferior cerebellar
artery (AICA)



The superior cerebellar artery travels from the end of the basilar artery over the cerebellum and UNDER the tentorium cerebelli.





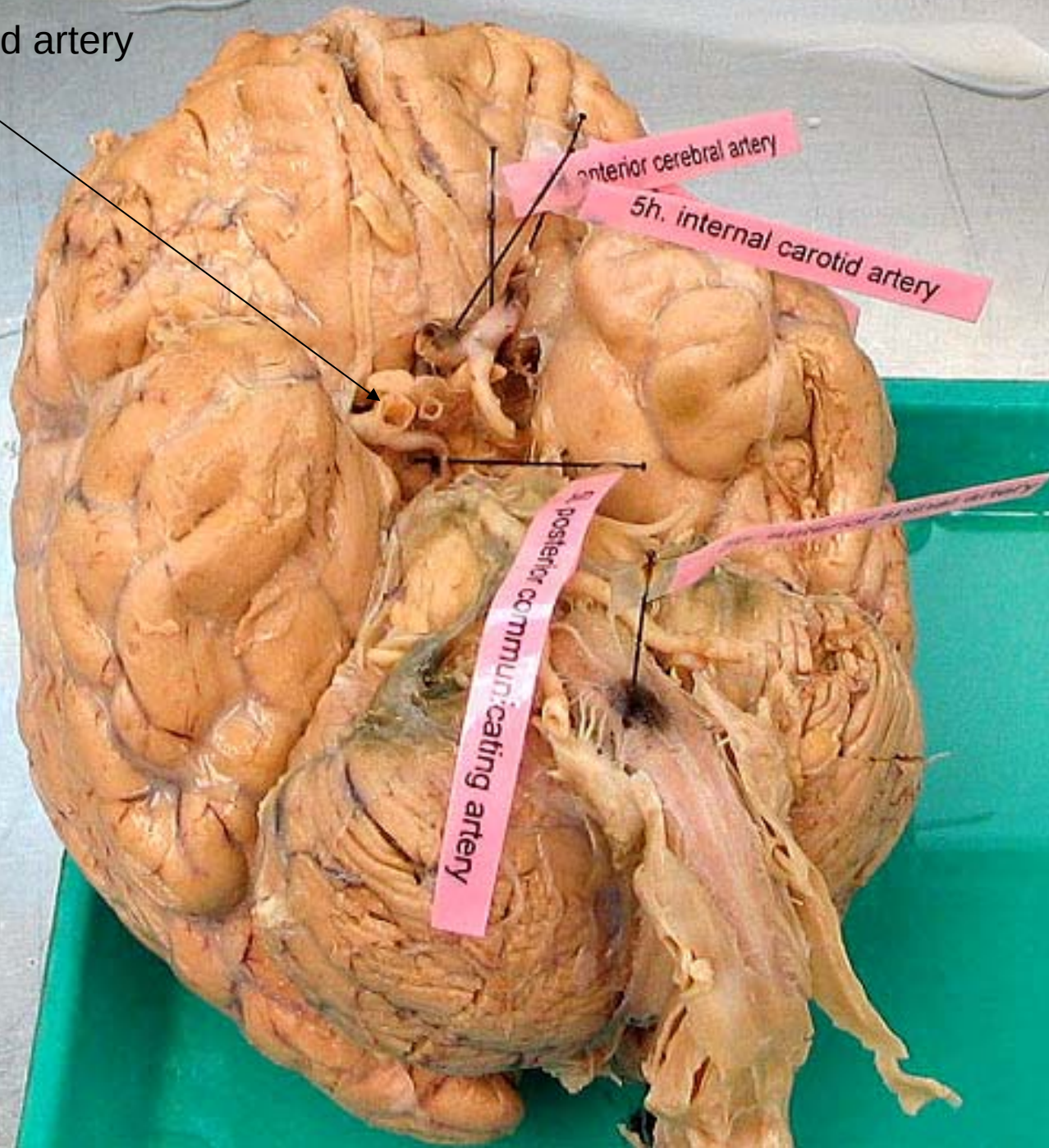
5c. basilar artery

5a. vertebral artery

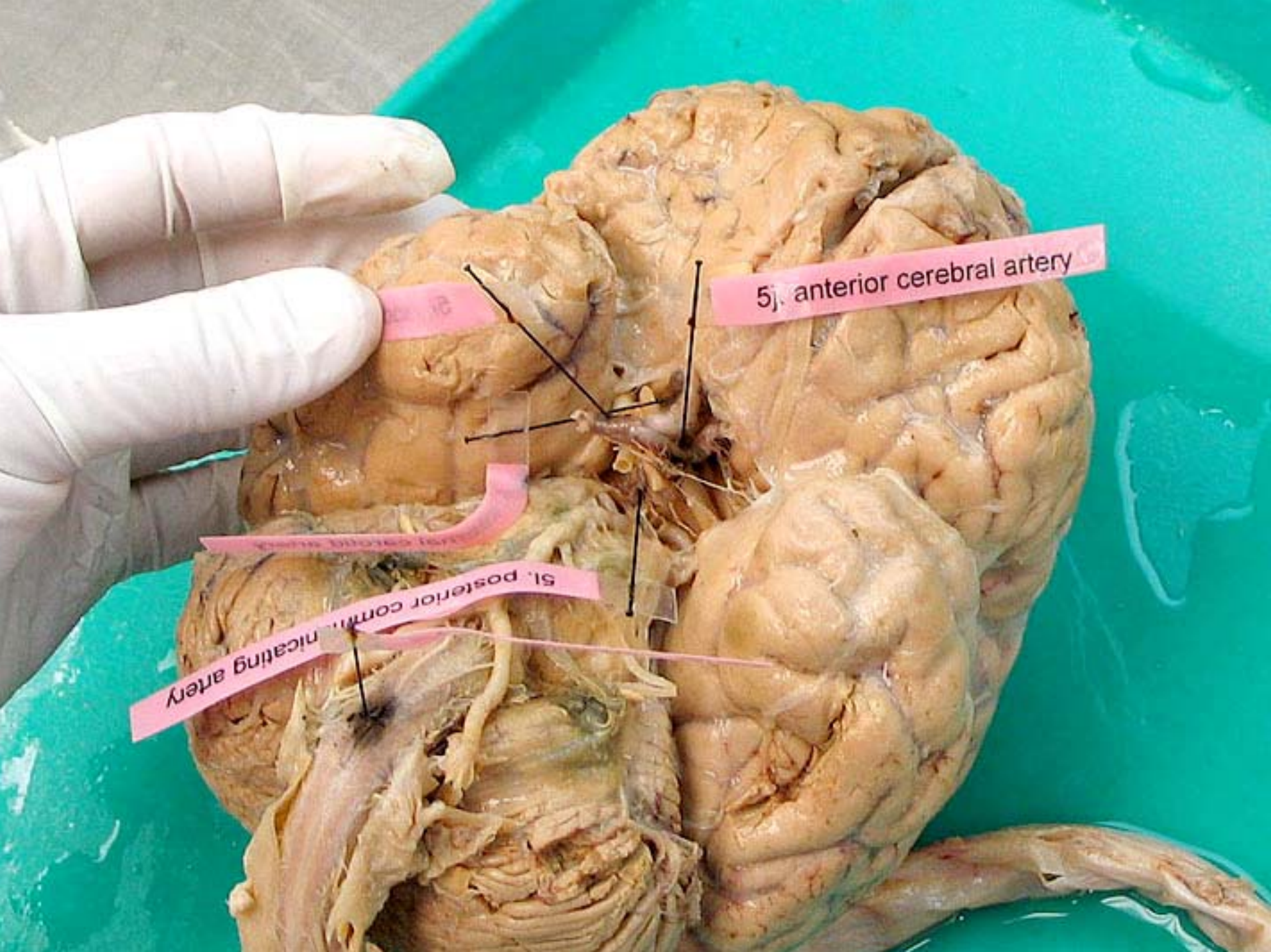
5g. posterior cerebral artery

5f. Circle of Willis

Left internal carotid artery







5j. anterior cerebral artery

5l. posterior communicating artery

5k. posterior communicating artery

5k. anterior communicating artery

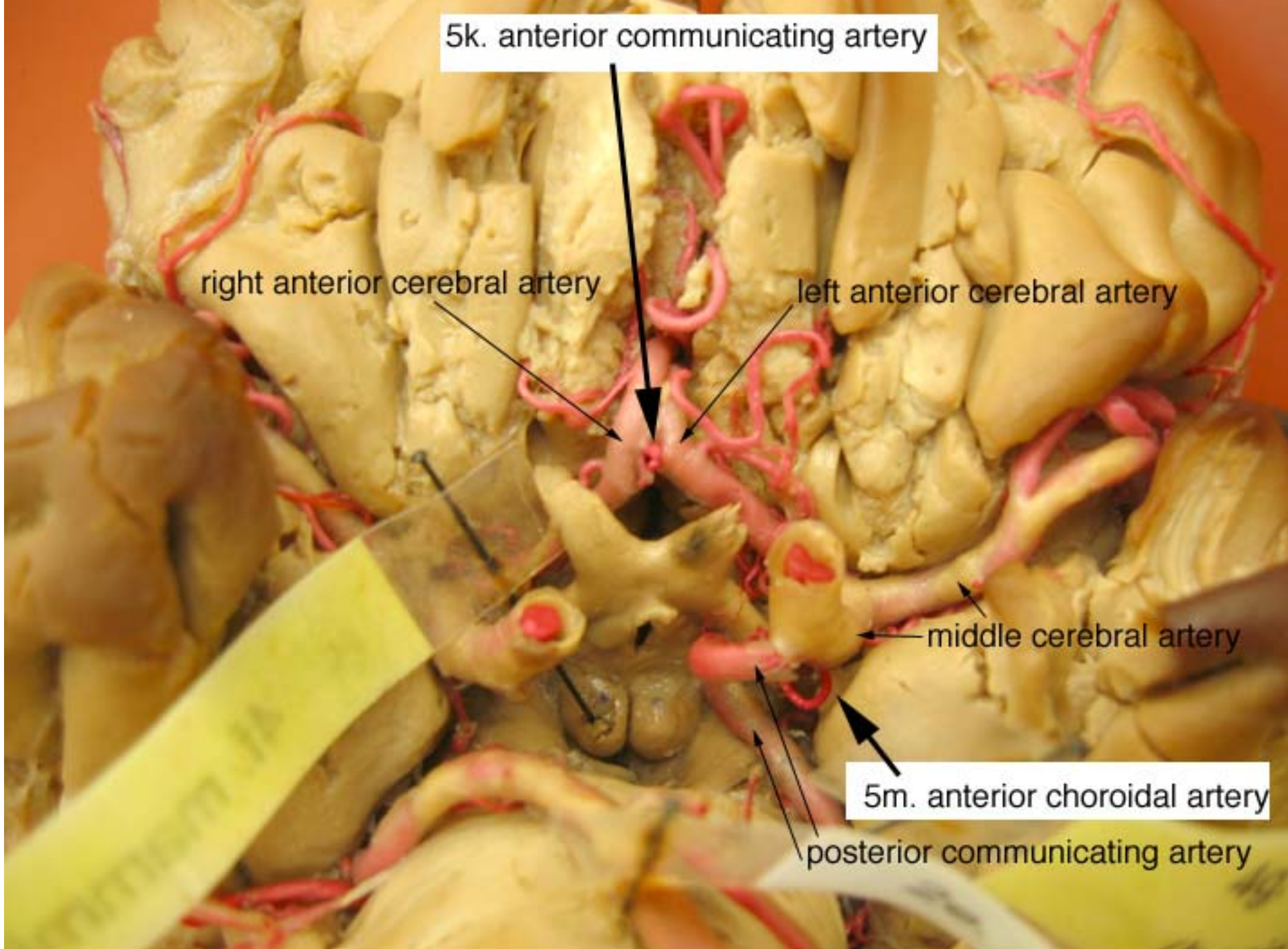
right anterior cerebral artery

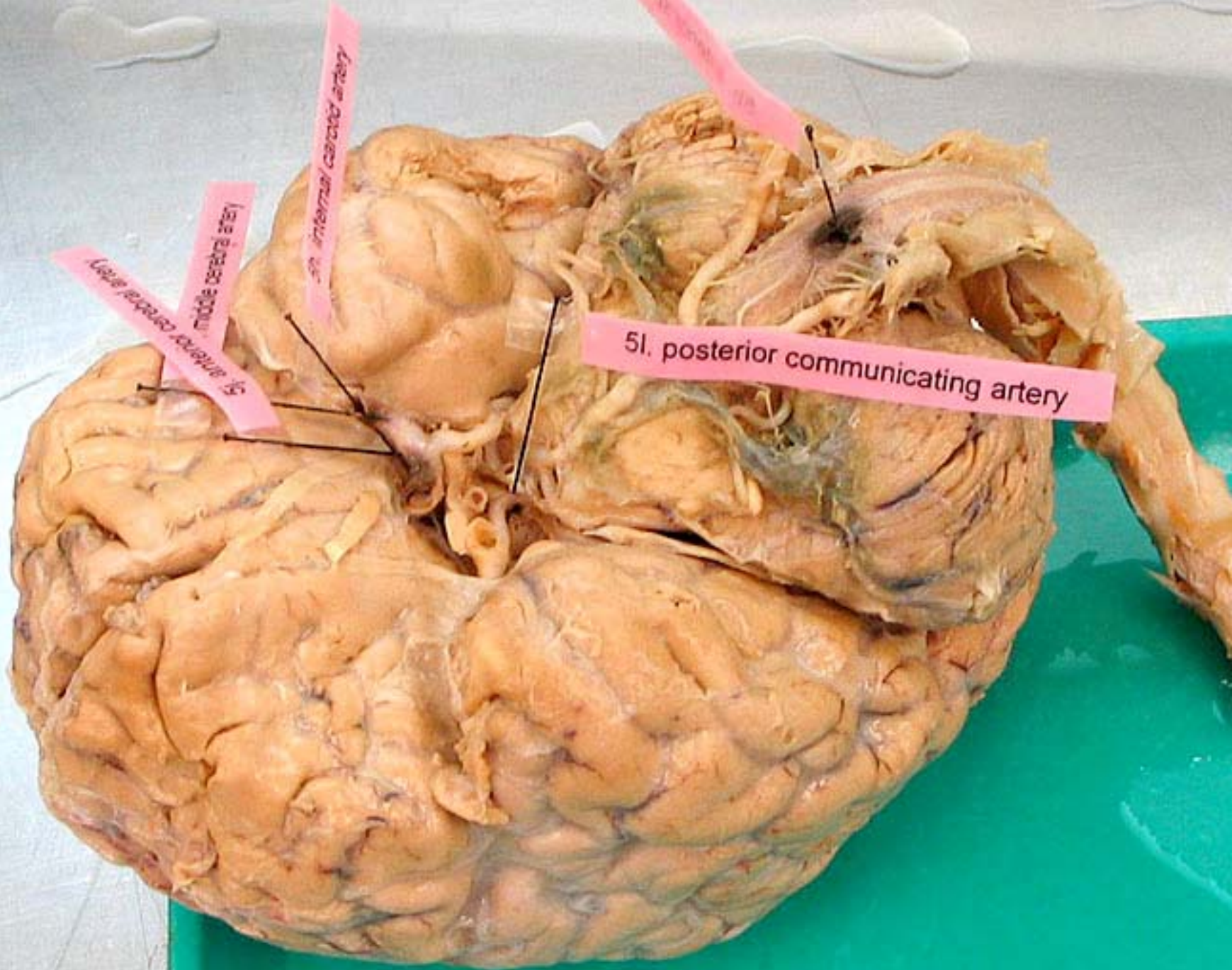
left anterior cerebral artery

middle cerebral artery

5m. anterior choroidal artery

posterior communicating artery





The yellow pins mark
the components of
the Circle of Willis

