Contralateral selective saccadic palsy after a small haematoma in the corona radiata adjacent to the genu of the internal capsule

Contralateral saccadic palsy with ipsilateral conjugate deviation of the eyes is usually attributed to lesions involving the frontal eye field (FEF) or connections with that area coursing through the internal capsule. The lesions are usually so large that they cause obturation and contralateral hemiparesis. Pathological confirmation of the lesions confined to the FEF or its connections has not been reported. We report a case of contralateral selective saccadic palsy with neither clounding of consciousness nor limb weakness after a very small haematoma in the corona radiata adjacent to the genu of the internal capsule.

A 20 year old woman developed acute dysarthria whilst in hospital for a broken leg. After defaecation, she had developed speech disturbance, immediately followed by right facial drooping. Blood pressure was 160/100 mm Hg and pulse 90 minutes. On neurological examination, she was alert and cooperative. Her eyes deviated upwards to the left but she was able to follow slowly moving targets in either horizontal direction. Optokinetic testing with targets moving to the patient's right evoked a normal nystagmus response but the eyes deviated tonically into an eccentric leftward position with the target moving to the left. She had minimal right lower facial weakness and mild pureticular dysarthria. She complained of difficulty in swallowing liquids, and palatal and pharyngeal weakness was present on the right. There was no deviation of the tongue on protrusion. Facial and buccal sensation were normal. Motor, sensory and cerebellar functions were normal in the limbs except for the following signs of subtle corticospinal damage: when the fingers were stretched out voluntarily, abduction of the fifth finger (a digitiv quinti sign of Alter) and adduction and flexion of the first metacarpal (a hollow hand sign of Garcić) were noted on the right side. Tendon reflexes were normal with flexor plantar responses.

A CT scan revealed a round hyperdensity, of approximately 7 mm diameter, located in the left corona radiata adjacent to the genu of the internal capsule, suggesting a small haematoma (fg).

Her oculomotor disorder disappeared within two weeks. Two months after the stroke, neurological examination was normal.

Our patient presented contralateral selective saccadic palsy and contralateral supranuclear facio-palato-pharyngeal paresis, but no weakness of the tongue and limbs.

According to recent anatomical studies in monkeys, the major pathway from the frontal eye field descends in or slightly anterior to the genu of the internal capsule near the caudate head. The very restricted lesion of our patient suggests that the descending pathway from the FEF in humans may pass through the genu of the internal capsule in parallel with the corticobulbar tract.

---


---

Contralateral selective saccadic palsy after a small haematoma in the corona radiata adjacent to the genu of the internal capsule

CT scan shows a round hyperdensity in the left corona radiata adjacent to the genu of the internal capsule.
Contralateral selective saccadic palsy after a small haematoma in the corona radiata adjacent to the genu of the internal capsule.

T Fukutake, K Hirayama and R Sakakibara

"J Neurol Neurosurg Psychiatry" 1993 56: 221
doi: 10.1136/jnnp.56.2.221

Updated information and services can be found at:
http://jnnp.bmj.com/content/56/2/221.citation

These include:

Email alerting service
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/