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## Glomus jugulare tumor

A glomus jugulare tumor is a tumor of the part of the temporal bone in the skull that involves the middle and inner ear structures. This tumor can affect the ear, upper neck, base of the skull, and the surrounding blood vessels and nerves.

### Causes

A glomus jugulare tumor grows in the temporal bone of the skull, in an area called the jugular foramen. The jugular foramen is also where the jugular vein and several important nerves exit the skull.

This area contains nerve fibers, called glomus bodies. Normally, these nerves respond to changes in body temperature or blood pressure.

These tumors most often occur later in life, around age 60 or 70, but they can appear at any age. The cause of a glomus jugulare tumor is unknown. In most cases, there are no known risk factors. Glomus tumors have been associated with changes (mutations) in a gene responsible for the enzyme succinate dehydrogenase (SDHD).

### Symptoms

Symptoms may include:

- Difficulty swallowing (dysphagia)
- Dizziness
- Hearing problems or loss
- Hearing pulsations in the ear
- Hoarseness
- Pain
- Weakness or loss of movement in the face (facial nerve palsy)

### Exams and Tests

Glomus jugulare tumors are diagnosed by a physical exam and imaging tests, including:

- Cerebral angiography
- CT scan

- MRI scan

## Treatment

Glomus jugulare tumors are rarely cancerous and do not tend to spread to other parts of the body. However, treatment may be needed to relieve symptoms. The main treatment is surgery. Surgery is complex and is most often done by a neurosurgeon, head and neck surgeon, and ear surgeon (neurotologist).

In some cases, a procedure called embolization is performed before surgery to prevent the tumor from bleeding too much during surgery.

After surgery, radiation therapy may be used to treat any part of the tumor that could not be removed completely.

Some glomus tumors can be treated with stereotactic radiosurgery.

## Outlook (Prognosis)

People who have surgery or radiation usually do well. More than 90% of those with glomus jugulare tumors are cured.

## Possible Complications

The most common complications are due to nerve damage, which may be caused by the tumor itself or damage during surgery. Nerve damage can lead to:

- Change in voice
- Difficulty swallowing
- Hearing loss
- Paralysis of the face

## When to Contact a Medical Professional

Contact your health care provider if you:

- Are having difficulty with hearing or swallowing
- Develop pulsations in your ear
- Notice a lump in your neck
- Notice any problems with the muscles in your face

## Alternative Names

Paraganglioma - glomus jugulare

## References

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