



braintumour
foundation

OF CANADA

For additional Information Sheets or to learn more about other brain tumour topics, visit www.BrainTumour.ca

Brain Tumour Foundation of Canada Information Sheets are provided as an informational and educational tool and are not intended to replace the advice or instruction of a professional healthcare practitioner, or to substitute for medical care. We urge you to seek specific medical advice on individual matters of concern.

Brain Tumour Foundation of Canada is generously supported by individuals, corporations and employee groups. It is through the tireless dedication of donors that help is available for anyone affected by a brain tumour, including patients, survivors and their loved ones.

Brain Tumour Types Info Sheet

Juvenile Pilocytic Astrocytoma (JPA)

Overview:

Tumour Group:

Gliomas and Pediatric Brain Tumours

WHO Grade:

Grade I

Prevalence/Incidence:

Pilocytic astrocytomas comprise approximately 5-6% of all gliomas. This tumour type has an overall incidence of 0.37 per 100,000 persons per year.

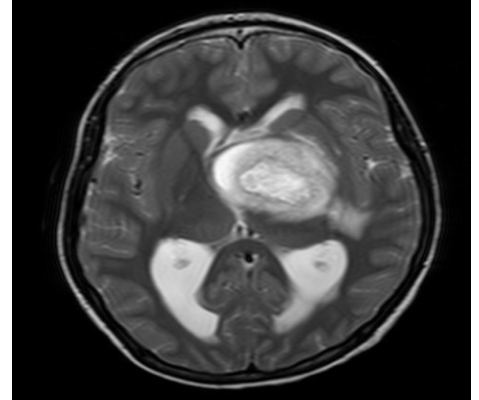
Typical Age Range:

Pilocytic astrocytomas are typically seen in children and young adults. They can occur at all ages in children and teens, but the median age for a juvenile pilocytic astrocytoma (JPA) is 5 to 14 years. This tumour type is unusual in infants and very rare in adults.

Description of Tumour:

JAPs are also known as pilocytic astrocytomas. These tumours grow in the cerebrum, optic nerve pathways, brainstem and cerebellum. They are slow-growing and are the most common subtype of a low-grade glioma.

- In children they are very common in the cerebellum and may lead to raised intracranial pressure
- Pathologically they have relatively well-defined borders and Rosenthal fibers are seen under the microscope.
- These types of astrocytomas typically stay in the area where they started and do not spread. They are considered the most non-malignant of all the astrocytomas.



... continued on Page 2

you are **not** alone

Additional support, information and education offered by Brain Tumour Foundation of Canada:

Adult, Pediatric and Non-Malignant Brain Tumour Handbooks available in English and French.

"A Friend in Hope" children's storybook available in English and French.

20+ Adult Support Groups across Canada (in-person and virtual)

Toll-free information and support line

BrainWAVE Pediatric Support Program

Print BrainStorm Newsletter
Email Newsletters:
• E-BrainStorm
• Peace of Mind

"Grey Matters" Blog

All patient resources are available free-of-charge. In Canada Call 1-800-265-5106 or visit www.BrainTumour.ca for additional details and information.

Symptoms:

Symptoms depend on the size and location of the tumour and may include:

- Change in behaviour
- Headaches and vomiting (due to raised intracranial pressure)
- Lack of coordination and loss of balance (due to cerebellar involvement)
- Memory loss
- Seizures.

Treatment/Standard of Care:

- Surgery is usually the most important treatment type for JPA. Complete surgical removal is generally possible for JPAs arising in the cerebellum and then no further treatment is necessary
- If total removal is not possible, chemotherapy is often used to shrink these tumours. Sometimes then surgery is possible and sometimes the tumour will not progress further after chemotherapy
- Occasionally radiation therapy is necessary (for example if the tumour has grown into the brainstem).

The role of chemotherapy is changing in JPA treatment. Some response has now been found with chemotherapeutic agents.

Prognosis:

For low-grade astrocytomas, like JPA, the 10-year overall survival was 83% in a large retrospective series. There was improved survival with:

- Pilocytic astrocytoma
- Hemispheric tumour location
- Greater extent of resection.

For more details, please refer to braintumour.ca.



braintumour
foundation
OF CANADA

205 Horton St E
Suite 203
London, Ontario
N6B 1K7

📞 519.642.7755
1 [800] 265.5106
📠 519.642.7192
www.braintumour.ca

