

## Gambaran klinis radiologis histopatologis dan faktor prognostik tumor otak pada anak = Clinical radiology histopathology features and prognostic factor of child brain tumor

Siregar, Marsintauli Hasudungan, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20422710&lokasi=lokal>

---

### Abstrak

[<b>ABSTRAK</b><br>

Tumor otak (TO) merupakan penyebab kematian kedua dari semua kanker yang terjadi pada anak. TO memiliki gambaran klinis, radiologis dan histopatologis yang sangat bervariasi karena proses pengembangan sel-sel jaringan otak masih berlanjut sampai usia 3 tahun. Data penelitian mengenai TO pada anak masih sedikit.

Tujuan: Untuk mengetahui gambaran klinis, radiologis, histopatologis dan faktor prognostik TO di Departemen Ilmu Kesehatan Anak FKUI/ RS. Dr.

Ciptomangunkusumo Jakarta periode tahun 2010 - 2015.

Metode Penelitian: Kohort retrospektif dilakukan pada semua anak dengan TO primer yang berobat/dirawat di Departemen Ilmu Kesehatan Anak FKUI/RS Dr. Ciptomangunkusumo Jakarta.

Hasil: Didapatkan 88 pasien TO primer, terdiri dari 16 pasien berusia kurang dari 3 tahun dan 72 pasien berusia lebih dari 3 tahun, laki-laki 53% dan perempuan 47%. Anak usia kurang dari 3 tahun mengalami gejala sakit kepala (63%) dan kejang (56%), berdasarkan radiologis letak TO yang terbanyak adalah di cerebral ventrikel (25%) dan cerebellum (24%), berdasarkan histopatologis jenis TO yang terbanyak adalah Astrositoma (31%) dan Medulloblastoma (25%). Anak usia lebih dari 3 tahun mengalami gejala sakit kepala (81%) dan gangguan penglihatan (65%), berdasarkan radiologis letak TO yang terbanyak adalah di cerebellum (24%) dan suprasellar (10 %), berdasarkan histopatologis jenis TO yang terbanyak adalah Medulloblastoma (21%), Astrositoma (18%) dan Glioma (17%). Angka kehidupan TO adalah 37 %. Tidak didapatkan faktor prognostik TO yang bermakna.

Kesimpulan: Gejala TO tersering adalah sakit kepala, berdasarkan radiologis letak tumor terbanyak adalah di cerebellum serta berdasarkan histopatologis jenis tumor terbanyak adalah Medulloblastoma dan Astrositoma. Tidak didapatkan faktor prognostik TO pada anak.

<hr>

<b>ABSTRACT</b><br>

Primary brain tumors rank second as the most frequent neoplasm in children. The lesions occurring in neonates or infants have been reported to differ from those in older children in terms of their clinical presentation, radiology and histopathology features.

Objective To clarify the clinical presentation, radiology, histopathology features. and prognostic factor of primary brain tumors in Child Department Ciptomangunkusumo Hospital Jakarta in 2010 - 2015.

Method: Retrospective cohort using medical records and neuroradiological dan histopathological studies, we analyzed each patient?s clinical presentation, tumor location, histopathological diagnosis and treatment then we compared between under 3 years of age and more 3 years of age . The patients were followed until their death or until the end of October 2015.

Result: 88 patient of primer brain tumor that consist of 16 patients with under 3 years of age and 72 patients with more 3 years of age. Boys are 53% and girls are 47% . The most symptoms of children under 3 years of age is headache (63%) and seizure (56%), based on radiology the most location tumor is cerebral ventrikel (25%) and cerebellum (24%), based on histopathology the predominant tumor is Astrositoma (31%) and Medulloblastoma (25%). The most symptoms of children more 3 years of age is headache (81%) and visual difficulties (65%), based on radiology the most tumor location is cerebellum (24%) and suprasellar (10 %), based on histopathology the predominant tumor is Medulloblastoma (21%), Astrositoma (18%) and Glioma (17%). The life expectancy rate is 37 % . There is no prognostic factor of brain tumor.

Conclusion: The most symptom of brain tumor is headache, based on radiology the most tumor location is cerebellum, and based on histopathology the predominant tumor is Medulloblastoma and Astrositoma. There is no prognostic factor of brain tumor.;

Background: Primary brain tumors rank second as the most frequent neoplasm in children. The lesions occurring in neonates or infants have been reported to differ from those in older children in terms of their clinical presentation, radiology and histopathology features.

Objective To clarify the clinical presentation, radiology, histopathology features. and prognostic factor of primary brain tumors in Child Department Ciptomangunkusumo Hospital Jakarta in 2010 - 2015.

Method: Retrospective cohort using medical records and neuroradiological dan histopathological studies, we analyzed each patient?s clinical presentation, tumor location, histopathological diagnosis and treatment then we compared between under 3 years of age and more 3 years of age . The patients were followed until their death or until the end of October 2015.

Result: 88 patient of primer brain tumor that consist of 16 patients with under 3 years of age and 72 patients with more 3 years of age. Boys are 53% and girls are 47% . The most symptoms of children under 3 years of age is headache (63%) and seizure (56%), based on radiology the most location tumor is cerebral ventrikel (25%) and cerebellum (24%), based on histopathology the predominant tumor is Astrositoma (31%) and Medulloblastoma (25%). The most symptoms of children more 3 years of age is headache (81%) and visual difficulties (65%), based on radiology the most tumor location is cerebellum (24%) and suprasellar

(10 %), based on histopathology the predominant tumor is Medulloblastoma (21%), Astrocytoma (18%) and Glioma (17%). The life expectancy rate is 37 %. There is no prognostic factor of brain tumor.

Conclusion: The most symptom of brain tumor is headache, based on radiology the most tumor location is cerebellum, and based on histopathology the predominant tumor is Medulloblastoma and Astrocytoma. There is no prognostic

factor of brain tumor.;Background: Primary brain tumors rank second as the most frequent neoplasm in children. The lesions occurring in neonates or infants have been reported to differ from those in older children in terms of their clinical presentation, radiology and histopathology features.

Objective To clarify the clinical presentation, radiology, histopathology features. and prognostic factor of primary brain tumors in Child Department Ciptomangunkusumo Hospital Jakarta in 2010 - 2015.

Method: Retrospective cohort using medical records and neuroradiological and histopathological studies, we analyzed each patient's clinical presentation, tumor location, histopathological diagnosis and treatment then we compared between under 3 years of age and more 3 years of age . The patients were followed until their death or until the end of October 2015.

Result: 88 patient of primary brain tumor that consist of 16 patients with under 3 years of age and 72 patients with more 3 years of age. Boys are 53% and girls are 47% . The most symptoms of children under 3 years of age is headache (63%) and seizure (56%), based on radiology the most location tumor is cerebral ventricle (25%) and cerebellum (24%), based on histopathology the predominant tumor is Astrocytoma (31%) and Medulloblastoma (25%). The most symptoms of children more 3 years of age is headache (81%) and visual difficulties (65%), based on radiology the most tumor location is cerebellum (24%) and suprasellar (10 %), based on histopathology the predominant tumor is Medulloblastoma (21%), Astrocytoma (18%) and Glioma (17%). The life expectancy rate is 37 %. There is no prognostic factor of brain tumor.

Conclusion: The most symptom of brain tumor is headache, based on radiology the most tumor location is cerebellum, and based on histopathology the predominant tumor is Medulloblastoma and Astrocytoma. There is no prognostic

factor of brain tumor.;Background: Primary brain tumors rank second as the most frequent neoplasm in children. The lesions occurring in neonates or infants have been reported to differ from those in older children in terms of their clinical presentation, radiology and histopathology features.

Objective To clarify the clinical presentation, radiology, histopathology features. and prognostic factor of primary brain tumors in Child Department Ciptomangunkusumo Hospital Jakarta in 2010 - 2015.

Method: Retrospective cohort using medical records and neuroradiological and histopathological studies, we analyzed each patient's clinical presentation, tumor location, histopathological diagnosis and treatment then we compared between

under 3 years of age and more 3 years of age . The patients were followed until their death or until the end of October 2015.

Result: 88 patient of primer brain tumor that consist of 16 patients with under 3 years of age and 72 patients with more 3 years of age. Boys are 53% and girls are 47% . The most symptoms of children under 3 years of age is headache (63%) and seizure (56%), based on radiology the most location tumor is cerebral ventrikel (25%) and cerebellum (24%), based on histopathology the predominant tumor is Astrositoma (31%) and Medulloblastoma (25%). The most symptoms of children more 3 years of age is headache (81%) and visual difficulties (65%), based on radiology the most tumor location is cerebellum (24%) and suprasellar (10 %), based on histopathology the predominat tumor is Medulloblastoma (21%), Astrositoma (18%) and Glioma (17%). The life expectancy rate is 37 % . There is no prognostic factor of brain tumor.

Conclusion: The most symptom of brain tumor is headache, based on radiology the most tumor location is cerebellum, and based on histopathology the predominant tumor is Medulloblastoma and Astrositoma. There is no prognostic

factor of brain tumor.;Background: Primary brain tumors rank second as the most frequent neoplasm in children. The lesions occurring in neonates or infants have been reported to differ from those in older children in terms of their clinical presentation, radiology and histopathology features.

Objective To clarify the clinical presentation, radiology, histopathology features. and prognostic factor of primary brain tumors in Child Department Ciptomangunkusumo Hospital Jakarta in 2010 - 2015.

Method: Retrospective cohort using medical records and neuroradiological dan histopathological studies, we analyzed each patient?s clinical presentation, tumor location, histopathological diagnosis and treatment then we compared between under 3 years of age and more 3 years of age . The patients were followed until their death or until the end of October 2015.

Result: 88 patient of primer brain tumor that consist of 16 patients with under 3 years of age and 72 patients with more 3 years of age. Boys are 53% and girls are 47% . The most symptoms of children under 3 years of age is headache (63%) and seizure (56%), based on radiology the most location tumor is cerebral ventrikel (25%) and cerebellum (24%), based on histopathology the predominant tumor is Astrositoma (31%) and Medulloblastoma (25%). The most symptoms of children more 3 years of age is headache (81%) and visual difficulties (65%), based on radiology the most tumor location is cerebellum (24%) and suprasellar (10 %), based on histopathology the predominat tumor is Medulloblastoma (21%), Astrositoma (18%) and Glioma (17%). The life expectancy rate is 37 % . There is no prognostic factor of brain tumor.

Conclusion: The most symptom of brain tumor is headache, based on radiology the most tumor location is cerebellum, and based on histopathology the predominant tumor is Medulloblastoma and Astrositoma. There is no prognostic

factor of brain tumor.;Background: Primary brain tumors rank second as the most frequent neoplasm in children. The lesions occurring in neonates or infants have been reported to differ from those in older children in terms of their clinical presentation, radiology and histopathology features.

Objective To clarify the clinical presentation, radiology, histopathology features. and prognostic factor of primary brain tumors in Child Department Ciptomangunkusumo Hospital Jakarta in 2010 - 2015.

Method: Retrospective cohort using medical records and neuroradiological dan histopathological studies, we analyzed each patient?s clinical presentation, tumor location, histopathological diagnosis and treatment then we compared between under 3 years of age and more 3 years of age . The patients were followed until their death or until the end of October 2015.

Result: 88 patient of primer brain tumor that consist of 16 patients with under 3 years of age and 72 patients with more 3 years of age. Boys are 53% and girls are 47% . The most symptoms of children under 3 years of age is headache (63%) and seizure (56%), based on radiology the most location tumor is cerebral ventrikel (25%) and cerebellum (24%), based on histopathology the predominant tumor is Astrocitoma (31%) and Medulloblastoma (25%). The most symptoms of children more 3 years of age is headache (81%) and visual difficulties (65%), based on radiology the most tumor location is cerebellum (24%) and suprasellar (10 %), based on histopathology the predominant tumor is Medulloblastoma (21%), Astrocitoma (18%) and Glioma (17%). The life expectancy rate is 37 % . There is no prognostic factor of brain tumor.

Conclusion: The most symptom of brain tumor is headache, based on radiology the most tumor location is cerebellum, and based on histopathology the predominant tumor is Medulloblastoma and Astrocitoma. There is no prognostic

factor of brain tumor.;Background: Primary brain tumors rank second as the most frequent neoplasm in children. The lesions occurring in neonates or infants have been reported to differ from those in older children in terms of their clinical presentation, radiology and histopathology features.

Objective To clarify the clinical presentation, radiology, histopathology features. and prognostic factor of primary brain tumors in Child Department Ciptomangunkusumo Hospital Jakarta in 2010 - 2015.

Method: Retrospective cohort using medical records and neuroradiological dan histopathological studies, we analyzed each patient?s clinical presentation, tumor location, histopathological diagnosis and treatment then we compared between under 3 years of age and more 3 years of age . The patients were followed until their death or until the end of October 2015.

Result: 88 patient of primer brain tumor that consist of 16 patients with under 3 years of age and 72 patients with more 3 years of age. Boys are 53% and girls are 47% . The most symptoms of children under 3 years of age is headache (63%) and seizure (56%), based on radiology the most location tumor is cerebral

ventrikel (25%) and cerebellum (24%), based on histopathology the predominant tumor is Astrocytoma (31%) and Medulloblastoma (25%). The most symptoms of children more 3 years of age is headache (81%) and visual difficulties (65%), based on radiology the most tumor location is cerebellum (24%) and suprasellar (10%), based on histopathology the predominant tumor is Medulloblastoma (21%), Astrocytoma (18%) and Glioma (17%). The life expectancy rate is 37%. There is no prognostic factor of brain tumor.

Conclusion: The most symptom of brain tumor is headache, based on radiology the most tumor location is cerebellum, and based on histopathology the predominant tumor is Medulloblastoma and Astrocytoma. There is no prognostic factor of brain tumor.

Background: Primary brain tumors rank second as the most frequent neoplasm in children. The lesions occurring in neonates or infants have been reported to differ from those in older children in terms of their clinical presentation, radiology and histopathology features.

Objective To clarify the clinical presentation, radiology, histopathology features and prognostic factor of primary brain tumors in Child Department Ciptomangunkusumo Hospital Jakarta in 2010 - 2015.

Method: Retrospective cohort using medical records and neuroradiological and histopathological studies, we analyzed each patient's clinical presentation, tumor location, histopathological diagnosis and treatment then we compared between under 3 years of age and more 3 years of age. The patients were followed until their death or until the end of October 2015.

Result: 88 patients of primary brain tumor that consist of 16 patients with under 3 years of age and 72 patients with more 3 years of age. Boys are 53% and girls are 47%. The most symptoms of children under 3 years of age is headache (63%) and seizure (56%), based on radiology the most location tumor is cerebral ventrikel (25%) and cerebellum (24%), based on histopathology the predominant tumor is Astrocytoma (31%) and Medulloblastoma (25%). The most symptoms of children more 3 years of age is headache (81%) and visual difficulties (65%), based on radiology the most tumor location is cerebellum (24%) and suprasellar (10%), based on histopathology the predominant tumor is Medulloblastoma (21%), Astrocytoma (18%) and Glioma (17%). The life expectancy rate is 37%. There is no prognostic factor of brain tumor.

Conclusion: The most symptom of brain tumor is headache, based on radiology the most tumor location is cerebellum, and based on histopathology the predominant tumor is Medulloblastoma and Astrocytoma. There is no prognostic factor of brain tumor.

Background: Primary brain tumors rank second as the most frequent neoplasm in children. The lesions occurring in neonates or infants have been reported to differ from those in older children in terms of their clinical presentation, radiology and histopathology features.

Objective To clarify the clinical presentation, radiology, histopathology features and prognostic factor of primary brain tumors in Child Department

Ciptomangunkusumo Hospital Jakarta in 2010 - 2015.

Method: Retrospective cohort using medical records and neuroradiological dan histopathological studies, we analyzed each patient's clinical presentation, tumor location, histopathological diagnosis and treatment then we compared between under 3 years of age and more 3 years of age . The patients were followed until their death or until the end of October 2015.

Result: 88 patient of primer brain tumor that consist of 16 patients with under 3 years of age and 72 patients with more 3 years of age. Boys are 53% and girls are 47% . The most symptoms of children under 3 years of age is headache (63%) and seizure (56%), based on radiology the most location tumor is cerebral ventrikel (25%) and cerebellum (24%), based on histopathology the predominant tumor is Astrositoma (31%) and Medulloblastoma (25%). The most symptoms of children more 3 years of age is headache (81%) and visual difficulties (65%), based on radiology the most tumor location is cerebellum (24%) and suprasellar (10 %), based on histopathology the predominant tumor is Medulloblastoma (21%), Astrositoma (18%) and Glioma (17%). The life expectancy rate is 37 % . There is no prognostic factor of brain tumor.

Conclusion: The most symptom of brain tumor is headache, based on radiology the most tumor location is cerebellum, and based on histopathology the predominant tumor is Medulloblastoma and Astrositoma. There is no prognostic factor of brain tumor.;

Background: Primary brain tumors rank second as the most frequent neoplasm in children. The lesions occurring in neonates or infants have been reported to differ from those in older children in terms of their clinical presentation, radiology and histopathology features.

Objective To clarify the clinical presentation, radiology, histopathology features. and prognostic factor of primary brain tumors in Child Department

Ciptomangunkusumo Hospital Jakarta in 2010 - 2015.

Method: Retrospective cohort using medical records and neuroradiological dan histopathological studies, we analyzed each patient's clinical presentation, tumor location, histopathological diagnosis and treatment then we compared between under 3 years of age and more 3 years of age . The patients were followed until their death or until the end of October 2015.

Result: 88 patient of primer brain tumor that consist of 16 patients with under 3 years of age and 72 patients with more 3 years of age. Boys are 53% and girls are 47% . The most symptoms of children under 3 years of age is headache (63%) and seizure (56%), based on radiology the most location tumor is cerebral ventrikel (25%) and cerebellum (24%), based on histopathology the predominant tumor is Astrositoma (31%) and Medulloblastoma (25%). The most symptoms of children more 3 years of age is headache (81%) and visual difficulties (65%), based on radiology the most tumor location is cerebellum (24%) and suprasellar (10 %), based on histopathology the predominant tumor is Medulloblastoma (21%), Astrositoma (18%) and Glioma (17%). The life expectancy rate is 37 % .

There is no prognostic factor of brain tumor.

Conclusion: The most symptom of brain tumor is headache, based on radiology the most tumor location is cerebellum, and based on histopathology the predominant tumor is Medulloblastoma and Astrocytoma. There is no prognostic factor of brain tumor., Background: Primary brain tumors rank second as the most frequent neoplasm in children. The lesions occurring in neonates or infants have been reported to differ from those in older children in terms of their clinical presentation, radiology and histopathology features.

Objective To clarify the clinical presentation, radiology, histopathology features. and prognostic factor of primary brain tumors in Child Department Ciptomangunkusumo Hospital Jakarta in 2010 - 2015.

Method: Retrospective cohort using medical records and neuroradiological and histopathological studies, we analyzed each patient's clinical presentation, tumor location, histopathological diagnosis and treatment then we compared between under 3 years of age and more 3 years of age . The patients were followed until their death or until the end of October 2015.

Result: 88 patient of primary brain tumor that consist of 16 patients with under 3 years of age and 72 patients with more 3 years of age. Boys are 53% and girls are 47% . The most symptoms of children under 3 years of age is headache (63%) and seizure (56%), based on radiology the most location tumor is cerebral ventricle (25%) and cerebellum (24%), based on histopathology the predominant tumor is Astrocytoma (31%) and Medulloblastoma (25%). The most symptoms of children more 3 years of age is headache (81%) and visual difficulties (65%), based on radiology the most tumor location is cerebellum (24%) and suprasellar (10 %), based on histopathology the predominant tumor is Medulloblastoma (21%), Astrocytoma (18%) and Glioma (17%). The life expectancy rate is 37 %.

There is no prognostic factor of brain tumor.

Conclusion: The most symptom of brain tumor is headache, based on radiology the most tumor location is cerebellum, and based on histopathology the predominant tumor is Medulloblastoma and Astrocytoma. There is no prognostic factor of brain tumor.]