Pseudotumor Cerebri Syndrome: From Childhood to Adulthood Risk factors and Clinical presentation
Mahajnah M, Genizi J, Zahalka H, Andreus R, Zelnik N. J Child Neurol. 2020 Apr;35(5):311-316. doi:10.1177/0883073819895179.

Background: Pseudotumour cerebri syndrome (PTC) or idiopathic intracranial hypertension (IIH) is a significant cause of headache in children and adults. PTC or IIH = presence of raised ICP but no evidence for space occupying lesion, hydrocephalus, or cerebrospinal fluid pleocytosis.
Aim: To compare the risk factors and clinical presentation of PTC across life - from childhood to adulthood.
Methods: Retrospective survey of PTC patients aged >7 years between 2011 and 2013 Pooled analyses with published data, subdivided into 3 age groups: pre-young children, adolescents, and adults. Modified Dandy criteria is used for the diagnosis of PTC.

ACADEMIC P.E.A.R.L.S

Pediatric Evidence And Research Learning Snippet

PSEUDOTUMOR CEREBRI SYNDROME (PTC)

The Presenting Symptoms in Different Ages—A Pooled Analysis.

	Young Children, 0-11 y, n (%)	Adolescents, 12-17 y, n (%)	Adults, >18 y, n (%)
Headache	98 (68)	156 (83)	759 (77)
Visual impairment	68 (33)	82 (50)	365 (37)
Vomiting	29 (21)	45 (29)	3 (8)
Dizziness	5 (4)	17 (12)	97 (41)
Tinnitus	0	5 (2)	191 (20)

Results: N = 72 (10 pre-young children, 22 adolescents, 40 adults)
•Female gender: 20% in pre-young, 82% in adolescent, 85% in adult age-group
•Obesity: 10% in young children, 64% adolescents, 80% adults (P< .01)
•**Most common symptom 'headache':** in 70% young children & 82% adolescents
•**Most common clinical sign 'papilledema':** in all young children & 91% adolescent
•Mean CSF opening pressure: 33.6+8.12 cm H2O for 7-11 years, 34.9+8.1 cm H2O for age 12-18 years, 32.2+8.2 cm H2O for adults
•Pooled literature analysis of 1499 patients (170 children, 270 adolescents, 1059 adults): There is clear correlation of gender with age. Only 34% of pre-young children were obese, in contrast to 57% adolescents and 87% of adults (P< .01)

Authors' Conclusions
•PTC has different risk factors and clinical presentation throughout life
•In young children, there is no gender preference and most patients are not obese
•Risk factors in adolescents resemble those of adults: female gender and obesity are major risk factors in them

Key Message:
Young children with PTC may present without headache. Female gender and obesity are not significant risk factors in children.

EXPERT COMMENT

"PTC is under-recognized in children. The study provides a categorization of various clinical presentations of PTC in different age groups, so the diagnosis is hopefully not missed in children not belonging to the 'typical' patient population. Prospective studies are needed for early diagnosis and making data-driven treatment pathways for PTC in children."

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Reference

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