Tables

Authors	Design of study	Year	Range of age	Patients No	Endoscopic Procedure	VP Shunt	P-Value
Malheiros JA. et al. [7].	Prospectively study	2010	37 months	17	8	7	N/A
Kestle JRW. et al. [8].	RCT	2003	84 days	393	214	218	p = 0.09
Kulkarni AV. et al. [9].	RCT	2016	4-7 month	157	115	43	p = 0.004
Kulkarni AV. et al. [10].	RCT	2017	2-4 month	100	51	49	P=0.35
Kulkarni AV. et al. [11].	RCT	2018	5.6 month	78	61	19	p = 0.21
Lane JR. et al.[12].	RCT	2022	24 months	100	43	57	p = 0.017
Schiff SJ. et al. [13].	RCT	2021	N/A	100	51	49	p = 0.36
Punchak M. et al. [14].	RCT	2019	3 month	100	51	49	*P* = .483
Haq NU. et al. [15].	RCT	2022	6 month	60	34	9	p value of 0.05
Ahmed Simair. et al. [16].	RCT	2022	3.4± 6.45 days	30	15	15	p-value 0.70
Arynchyna-Smith A. et al. [17].	Prospectively study	2023	1-5 years	521	287	196	P = 0.001
Dewan MC. et al. [18].	Retrospective	2018	3.4 vs 2.9 months	72	18	54	p = 0.165

Table 1. Management of patients with pediatric hydrocephalus: treated with endoscopic third ventriculostomy (ETV) and ventriculoperitoneal shunt (VPS).

Authors	Kind of study	Year	Range of age	Patients No.	Diagnose	ETV/ VP shunt	ETV/CPC	Location	Follow up	P=value
Warf BC. et al. [19].	Prospective study	2013	<24 months	64	Congenital idiopathic hydrocephalus	16	48	The CURE Children's Hospital of Uganda	34.4/36.0 months	p < 0.0002
Chamiraju P. et al. [20].	retrospectively	2014	<3 months	17	Grade IV hemorrhage/hydrocephalus	10	27	N/A	6-40 months (mean 16.2 months)	N/A

Warf BC. et al. [21].	prospective study	2008	infants < 1 year	115	hydrocephalus/ myelomeningocele	93	71	East African	1 month	p = 0.021
Prajapati HP. et al. [22].	Retrospective	2022	0.5-204 months	195	hydrocephalus	43	152	Etawah, India	12 months	P= 0.42
Lodha KG. et al. [23].	prospective study	2020	6.75 months (ranged from 1.5 to 12 months)	30	hydrocephalus secondary to aqueduct stenosis	23	7	N/A	1 year	P= 0.03
Choudhary A. et al. [24].	retrospective	2020	2 months to 16 years	36	hydrocephalus /prepontine cistern	25	36	India	3 months	*P* = 0.047
Dewan MC. Et ak. [25].	Retrospective	2018	3.0/0.9 months	72	hydrocephalus/ myelomeningocele (MM)	54	18	Alabama at Birmingham	6-month	p = 0.29
Diallo O. et al. [26].	Retrospective	2023	(age ≤3 months)	365	hydrocephalus	N/A	199	Childrenʼs Hospital USA	6- to 12-month-old	*p* < 0.05
Haizel-Cobbina J. et al. [27].	ambispective cohort study	2025	6.9 months (IQR 1.4, 36.4)	325	myelomeningocele-associated hydrocephalus	172	75	Kumasi-Ghana	12 months	*p* = 0.13
Pindrik J. et al. [28].	Retrospective	2017	2 years	32	for congenital hydrocephalus	11	18	N/A	10.6 months	*p* = 0.0001

Navaei AA. et al. [29].	RCT	2018	6 months	49	obstructive HCP	27	22	Tehran University of Medical Sciences	36-month	*P* = 0.108
Stone SSD. et al. [30].	prospective series	2014	4.7 and 3.2 months	91	HCP	N/A	93	Boston Children's Hospital	18.6 months	p = 0.13)

Table 2. Hydrocephalus manifestations and surgical managements

Figures:

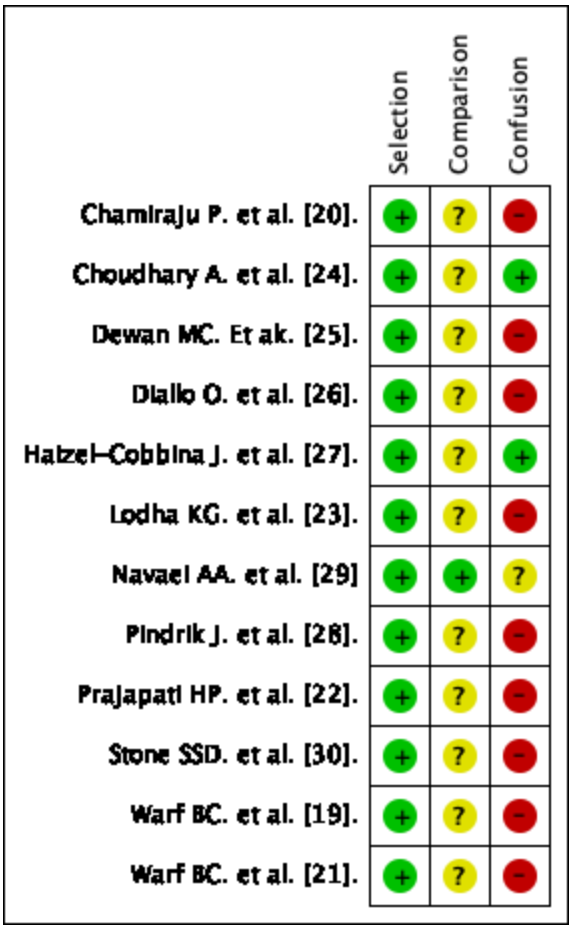

Figure. Risk of Bias, patients with hydrocephalus

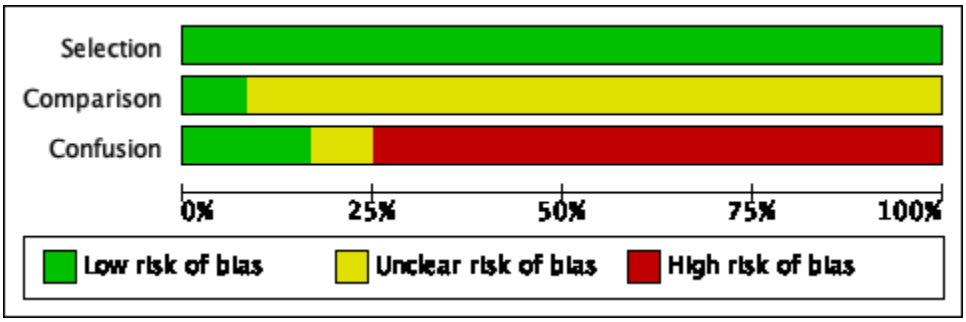

Figure. Risk of Bias of patients management of ETC-CPC and VP-shunt.

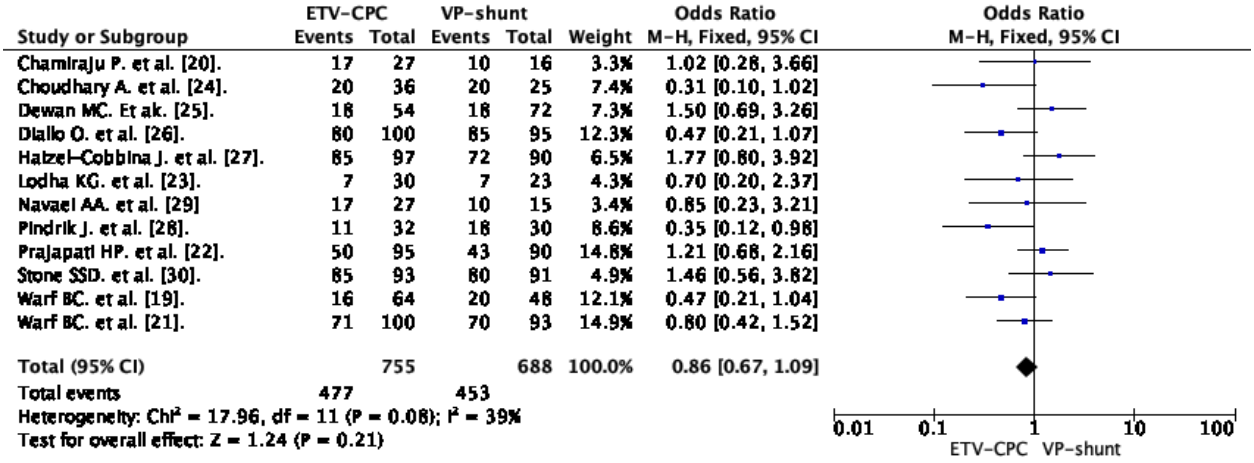

Figure . Odd-ratio; Patients with hydrocephalus managements with ETV-CPC and VP-shunt.

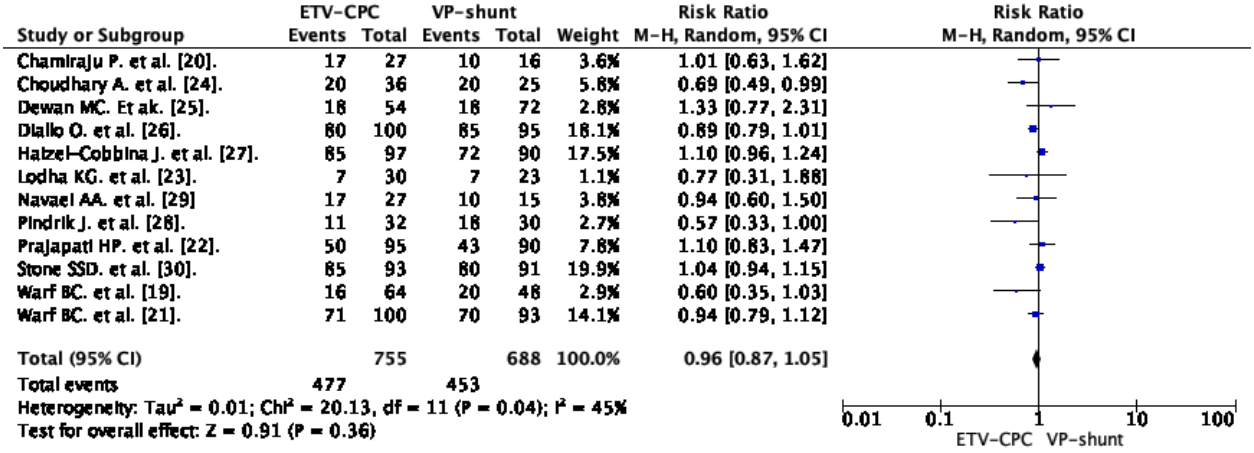

Figure . Risk-ratio Patients with pediatric hydrocephalus

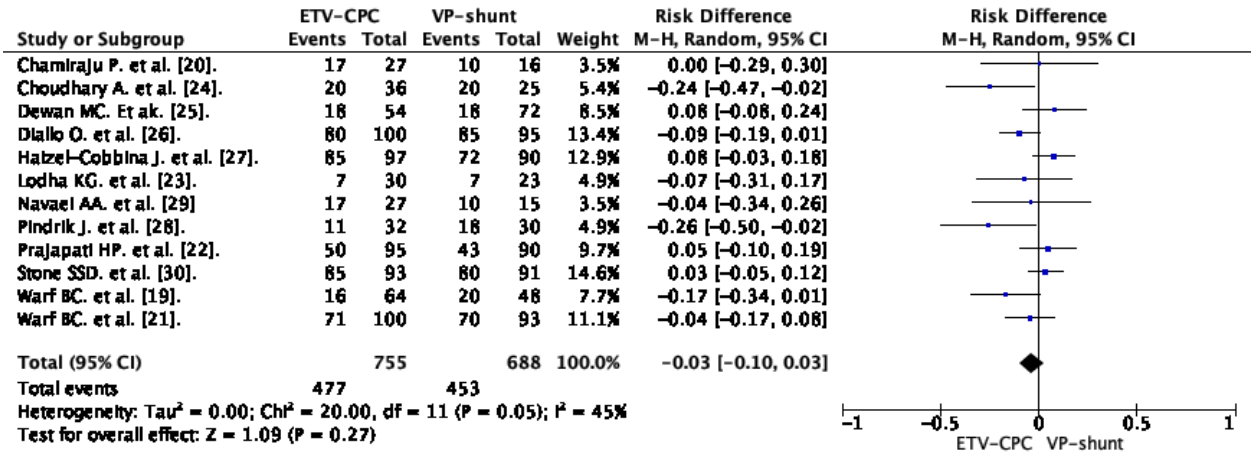

Figure. Florest Plot; management of hydrocephalus

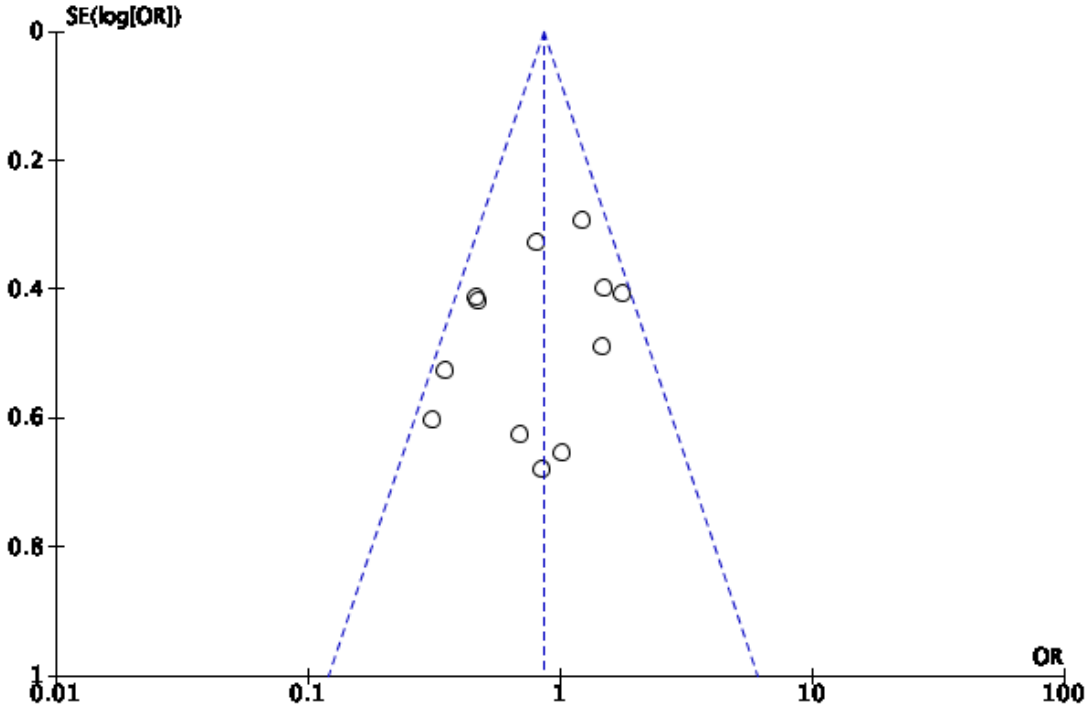

Figure. Funnel plot of Hydrocephalus treatment