

Objective	Variable	Isolated n=68	Non-Isolated n=64	P-value	Results
To evaluate clinical and postnatal outcomes of fetuses with non-visualized fetal gallbladder (NVFGB), focusing on isolated cases without additional structural anomalies.	Maternal Age (years)	31.5 (28–35.7)	31 (26–36)	0.51	132 cases were identified: 67 isolated (50.8%) and 65 non-isolated (49.2%). - Abnormal CMA findings were more common in non-isolated NVFGB (28.6% vs. 4.2%, P=0.02). - No significant differences were found in WES or digestive enzyme abnormalities. - Among isolated cases with postnatal ultrasound, persistent non-visualization occurred in 50%. - Biliary atresia (BA) was uncommon: 1/67 (1.5%) of isolated and ## in non-isolated cases. The remaining isolated NVFGB cases had good outcome.
	GA at diagnosis	22.6 (15.8–33.4)	22 (15.6–28.2)	0.67	
Methods					
- A retrospective cohort study conducted at a single tertiary center between 2013 and 2026. - Study population including all patients with non-visualized fetal gallbladder, defined as the absence of gallbladder visualization on prenatal ultrasound examinations. - Genetic analyses (including chromosomal microarray [CMA] and whole-exome sequencing [WES]), sonographic findings, the rate of biliary atresia (BA) and clinical outcomes were compared between isolated and non-isolated non-visualized fetal gallbladder cases	Amniotic fluid digestive enzymes (pathologic)	11.8 (2/17)	33.33 (5/15)	0.2	In both isolated and non-isolated NVFGB, biliary atresia is uncommon yet unpredictable. In cases without BA with normal genetic testing, outcomes are largely benign and require follow-up only. Patients should be counselled on the low but unpredictable risk of BA.
	CMA (pathologic)	4.2 (1/24)	28.6 (8/28)	0.02	
	WES (pathologic)	14.3 (1/7)	10 (1/10)	1	
	TOP	0 (0/68)	39 (25/64)	<0.01	
	IUFD	2.9 (2/68)	6.2 (4/64)	0.4	
	GA at delivery	39.3 (38.2–40.2)	38.5 (36.4–40.6)	0.23	
	Abnormal liver US after birth	60 (18/30)	4.6 (6/13)	0.4	
Data are presented as % (n) or median (interquartile range). CMA - Chromosomal Microarray Analysis; WES - Whole Exome Sequencing; TOP - Termination of Pregnancy; IUFD - Intrauterine fetal death; GA - Gestational Age; US - ultrasound. Bolded if significantly different.					
Among the 68 isolated NVFGB cases, 30 underwent postnatal ultrasound evaluation; 18 had abnormal liver ultrasound findings, including a small gallbladder (n=3) and persistent gallbladder non-visualization (n=15). One case had a hepatic cyst.					