

# Comparison between hybrid diabetes (HD) and type 2 diabetes (T2DM) in children; Patient's characteristics at diagnosis: a retrospective observational study.

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The "Hybrid Diabetes (HD)" is a new term that emerged in the last few years to describe diabetes with combined features of type 1 and type 2 diabetes.

The aetiology behind hybrid diabetes is not well understood.

The clinical characteristics for these unique patients were not described before.

Differentiating HD from other forms of diabetes can lead to a better understanding of the disease process, its course as well as the most appropriate management plan to prevent future complications.

## ☐ Patients and Methods:

Seven children who were identified as HD were compared to 59 children who were diagnosed with type 2 diabetes (age 7 to 18 years).

Their clinical and biochemical data at presentation were collected and analysed to delineate the difference between the 2 groups.

	HD	T2DM	p-value
	7	59	
Age (yr)	10.8	11.28	0.50
BMI SD	2.73	4.5	0.04
acanthosis	71%	90%	0.16
+ family history	85.70%	87%	0.29
Polyuria/polydipsia	57.10%	78%	0.22
ketosis no acidosis	14.20%	22%	0.64
DKA	28.60%	0%	<.0001
C-peptide	1.42	3.88	0.01
HbA1c at diagnosis	10.63%	10.05%	0.61

## Discussion:

Our study showed that children with HD were less obese and has lower C peptide levels and a higher risk to present with DKA compared to T2DM.

#### Conclusion:

- HD is a newly recognized subtype of diabetes and has special characteristics that can differentiate it from other types of diabetes.
- Further studies are needed to investigate the long-term prognosis and management plans for this group

