

PARTIAL PANCREATECTOMY IN CONGENITAL HYPERINSULINISM IN PEDIATRIC PATIENTS: A LITERATURE REVIEW

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RESUMO

ABSTRACT Congenital hyperinsulinism is the leading cause of persistent hypoglycemia in neonates, resulting from inappropriate insulin secretion. Untreated hypoglycemia may cause irreversible neurological damage; although initial management is clinical, some patients are refractory. In such cases, partial pancreatectomy is indicated, being curative in focal forms and a glycemic control strategy in diffuse forms. This study aimed to analyze, through a literature review, the indications, clinical outcomes, and metabolic consequences of partial pancreatectomy in pediatric patients with congenital hyperinsulinism. A narrative literature review (2012-2025) indexed in PubMed was conducted using the terms ((Congenital Hyperinsulinism) AND (Pancreatectomy)) AND (Pediatrics). Seven English-language studies on partial pancreatectomy in congenital hyperinsulinism were included, excluding adult populations and clinical treatment studies. The reviewed studies showed high rates of hypoglycemia resolution in focal congenital hyperinsulinism, with minimal long-term metabolic impact. Clinical reports demonstrated consistent resolution after limited pancreatic resection in focal disease. In contrast, outcomes in diffuse forms were heterogeneous, with partial reduction of hypoglycemia but frequent persistent dysglycemia and progression to diabetes mellitus. These findings indicate that surgical success depends on disease subtype, highlighting the importance of accurate preoperative classification. Additionally, long-term follow-up is essential to monitor postoperative metabolic complications. In conclusion, partial pancreatectomy is highly effective and often curative in focal congenital hyperinsulinism, whereas in diffuse forms it provides limited glycemic control and is associated with long-term metabolic complications.

Palavras-chave: Congenital Hyperinsulinism Pancreatectomy Pediatrics.