Thatikonda KB, Kalra M, Danewa A, Sachdeva P, Paul T, Sachdeva D, Sachdeva A.
Clinical Profile and Outcome of Childhood Autoimmune Hemolytic Anemia:
A Single Center Study. Indian Pediatr. 2021 Feb 25:S097475591600296.

Background: Autoimmune hemolytic anemia (AIHA) is the main cause of acquired extra corpuscular hemolysis in children. AIHA can be subdivided into primary (or idiopathic) and secondary.
Objective: The study analyzes the clinical, laboratory parameters and treatment outcomes of children with AIHA.
Design: Retrospective analysis of 50 children aged 0-18 years. Monospecific direct antiglobulin test (DAT) and investigations for secondary causes were analysed. The treatment given, its duration and their outcome were studied. Disease status was categorized based on Cerevance criteria.

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

Pediatric Evidence And Research Learning Snippet

Childhood Autoimmune Hemolytic Anemia
Experience from single centre in India.

Results - Median age at diagnosis- 36 months (1.5 months-17 years).

- Commonest clinical feature at diagnosis was pallor (100%) followed by fever (68%) and jaundice (60%). Hepatomegaly (90%) was seen more often than splenomegaly (38%).
- AIHA was categorized as cold [IgM+,C3+/cold agglutinin+ (35%), warm (IgG+ with/without C3+) (28%), mixed (IgG+, IgM+, C3+) (15%) and paroxysmal cold hemoglobinuria (4%).
- Primary AIHA accounted for 64% cases.
- Treatment modalities included steroid (66%), Intravenous Immunoglobulin (IVIg) (4%), steroid+ IVIg (4%), steroid+rituximab (4%).
- Treatment duration was longer for secondary AIHA than primary (11 vs 6.6 months, P<0.02) and in patients needing polytherapy than steroids only (13.3 vs 7.5 months, P<0.006).
- During median(range) follow-up period of 73 (1-150) months, 29 (58%) remained in continuous complete remission, 16 (32%) remained in complete remission.
- Among infants, hemolysis was found to be much severe than those who developed AIHA after infancy (mean (SD) hemoglobin, 3.96 (1.18) vs. 5.13 (1.65) g/dL,P =0.01).
- Secondary AIHA was identified in 36% cases with etiology being infection in 5 (M.pneumonia, 3; CMV, 1; Plasmodium vivax,1), autoimmune diseases in 5 (autoimmune hepatitis,2; SLE, 2; and giant cell hepatitis, 1). Other causes leading to secondary AIHA were Evans syndrome, 3 , malignancies (Hodgkin lymphoma, 2 and ALL, 1), CVID 1 and Wiskott Aldrich syndrome 1.

Conclusion - Managing AIHA in infants and those with secondary AIHA is challenging, with almost one-third patients needing additional agents to the steroid backbone.

EXPERT COMMENT

"Infants with AIHA have a more severe presentation. Mono specific DAT and a thorough search for an underlying cause, help optimize therapy in most patients of AIHA."

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With warm regards,

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Reference

Reference : Thatikonda KB, Kalra M, Danewa A, Sachdeva P, Paul T, Sachdeva D, Sachdeva A. Clinical Profile and Outcome of Childhood Autoimmune Hemolytic Anemia: A Single Center Study. Indian Pediatr. 2021 Feb 25:S097475591600296. Epub ahead of print. PMID: 33634793.