

# NEUTROPHIL-LYMPHOCYTE RATIO FOR PREDICTING CORONARY ARTERY LESIONS IN CHILDREN WITH KAWASAKI DISEASE

**AIM: To study the role of neutrophil-lymphocyte ratio (NLR) and other biomarkers in predicting the development of coronary artery lesions (CAL) and IVIG resistance in children with Kawasaki disease**

## SUBJECTS

Children diagnosed with Kawasaki disease between January 2016 and January 2020, meeting diagnostic criteria of American Heart Association Guidelines, 2017. **(N=79)**

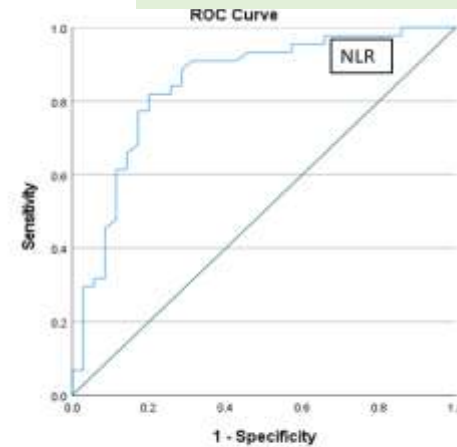
## METHODS

Clinical, laboratory & echocardiography data extracted from hospital records.

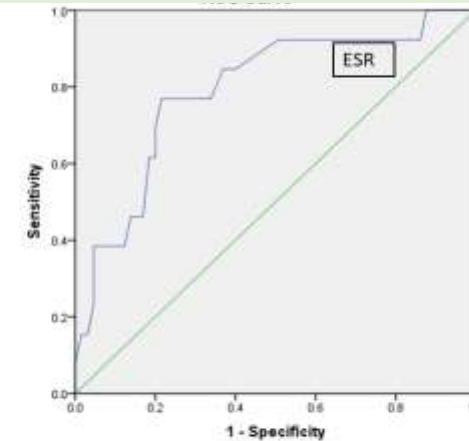
NLR was calculated from hemogram performed between day 4 and 6 of fever.

## RESULTS

CAL was found in 40 (50.6%) children  
IVIG resistance was found in 13(16.5%)



AUC- 0.85 95% CI (0.75,0.94)  
p-value <0.01  
Cut off value- 2.08  
Sensitivity-82%  
Specificity-80%



AUC- 0.79 95% CI (0.65, 0.93)  
p-value <0.01  
Cut off value- 88  
Sensitivity-85%  
Specificity-63%

NLR  $\geq 2.08$  & ESR  $\geq 88$  mm/hr were each  $>80\%$  sensitive in predicting CAL & IVIG resistance, respectively

**CONCLUSION: A high NLR value ( $\geq 2.08$ ) between days 4 and 6 of fever onset, reliably predicted CAL but did not predict IVIg resistance. An ESR value of  $\geq 88$  mm/hr predicted IVIg resistance.**

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