Summary and Conclusion

Summary

- The present study was conducted on 30 patients having variable degrees of Mitral regurge. (mild – moderate- severe) 20 of them were Rheumatic MR and 10 of them were congenital MR.
- The present study aimed to evaluate the reliability of mitral regurgitation color M- mode regurgitant flow propagation velocity (RFPV) in grading mitral regurgitation in children.

- **All patients subjected to :**

1-*full history and clinical examination.*

2- Echocardiographic evaluation including:

a) 2D echocardiography to establish the diagnosis & to exclude patients who are not fitting the criteria

b) Doppler assessment of mitral regurgitation degree (mild, moderate, severe)

c) Color Doppler assessment of mitral regurgitation , RF , ER orifice volume

d) Vena contracta measurement which is the narrowest portion of the proximal regurgitant jet

e) Mitral regurgitation color M-mode flow propagation velocity.

- **The results showed that :**

Sensitivity, specificity, positive predictive value, negative predictive value of jet length & jet area in correlation of left atrium area were calculated by comparison with quantitative pulsed Doppler assessment

- Sensitivity was 88.3%, specificity 56% + ve predicative value was 84.5% - ve predictive value was 75%.
- Sensitivity , specificity, +ve predictive value and –ve predictive value of vena contracta were calculated by comparison with quantitative pulsed Doppler assessment
- Sensitivity was 90%, specificity was 65%, +ve predictive value was 89% and –ve predictive value was 85%.
- Sensitivity, specificity, +ve predictive value and –ve predictive value of regurgitation flow propagation velocity (RFPV) were calculated by comparison with quantitative pulsed Doppler assessment.
- Sensitivity was 95%, specificity was 69%, +ve predictive value was 88% and +ve predictive value was 96%.

Conclusion

From the present study we can conclude that mitral regurgitation flow propagation velocity (RFPV) is a new simple and reliable method with high sensitivity for grading of mitral regurgitation.