Referral Patterns to a Pediatric Tertiary Cardiac Unit

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Background: New referrals to tertiary cardiac centers have and continue to increase despite the static prevalence of congenital heart disease.

Objective: To evaluate the referral patterns to a pediatric tertiary cardiac unit.

Setting: Cardiac Center, Bahrain Defense Force Hospital, Bahrain.

Design: A Retrospective Study.

Method: Two thousand three hundred eight patients were referred to a specialist pediatric cardiology unit over a ten-year period. Six-hundred seventy-five were excluded as they had known or previously diagnosed cardiac disease; therefore, the study sample is 1,633.

Result: One thousand six-hundred thirty-three patients were reviewed; the mean age was 3 years. The main reasons for referral were cardiac murmurs, chest pains, palpitations or syncope attacks. Six hundred and eighty-seven (42%) murmurs were innocent. One hundred fifty-four (9.4%) murmurs were pathological, only 33 (2%) required intervention. One hundred and twenty-five (7.6%) of children referred with chest pain; 121 had non-cardiac chest pains and 4 were of cardiac origin. Palpitations were seldom significant. No child with syncope was of cardiac origin.

Conclusion: One thousand five hundred fifty-one (95%) referrals had normal hearts. Heart murmurs are seldom pathological and rarely require any intervention. Chest pains, palpitations and syncope attacks in children without previously diagnosed heart disease are rarely of cardiac origin. Continued education and training of primary care physicians improve the skills in the clinical assessment and limit unnecessary referrals. Programs in performing basic echocardiogram could be initiated and monitored within a supported network.

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