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CORONARY ARTERY DIAMETERS IN PATIENTS WITH KAWASAKI DISEASE WITHOUT ANEURYSMS BY TWO-DIMENSIONAL ECHOCARDIOGRAPHY IN THE LATE PERIOD

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We measured the diameters of coronary arteries in patients with Kawasaki disease (KD) without aneurysms by two-dimensional echocardiography (2-DE) in the late period. The diameters of the right coronary artery (RCA), the left main trunk (LMT) and the left anterior descending artery (LAD) were measured. We investigated simple regression between body surface area (BSA) and the diameters of three coronary arteries with KD without aneurysms. We compared the regression parameters of KD group with those of normal group. The number of KD group and normal group were 144 and 133, respectively. The ages ranged from 0 year to 19 years. The regression parameter of respective branches with KD group were shown. $RCA=1.3(BSA)+0.6$ ($r=0.84$, $p=0.001$) $LMT=1.5(BSA)+1.2$ ($r=0.85$, $p=0.001$) $LAD=1.2(BSA)+0.9$ ($r=0.81$, $p=0.001$) The regression parameter of respective branches with normal group were shown. $RCA=1.2(BSA)+0.8$ ($r=0.88$, $p=0.001$) $LMT=1.4(BSA)+1.2$ ($r=0.89$, $p=0.001$) $LAD=1.1(BSA)+0.9$ ($r=0.89$, $p=0.001$) There were no significant differences in respective branches with two groups. Coronary artery diameters in patients with KD without aneurysms by 2-DE in the late period are within normal limits.

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HEALTH STATUS OF ADOLESCENTS AFTER KAWASAKI DISEASE

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Purpose: We sought to determine the health status and quality of life of adolescents after Kawasaki disease (KD), and its relationship with disease status and patient characteristics. **Methods:** The Child Health and Illness Profile (CHIP) questionnaire was completed by 25 adolescents (mean age 14 ± 3 years) at a mean interval of 12 ± 3 years after acute KD. The health status domains assessed with standardized scores included satisfaction with one's health, physical and psychologic discomfort, resilience (behaviors which reduce likelihood of illness or injury), risk (behaviors which increase likelihood of illness or injury), disorders (acute and chronic mental and physical illness or injury), and achievement (school and work accomplishments). **Results:** Coronary artery involvement included none in 14 subjects (56%), resolved aneurysms in 7 (28%) and persistent aneurysms in 4 (16%). CHIP domain and subdomain scores were converted to Z scores (standard deviations from predicted normal). Mean Z scores for the domains were as follows: normal satisfaction, 0.05 ± 0.81 ($p=0.75$ vs. normal); less discomfort, -0.44 ± 0.84 ($p=0.02$); more resilience, 0.83 ± 0.92 ($p<0.001$); less risk, -0.70 ± 0.67 ($p<0.001$); normal disorders, 0.22 ± 1.59 ($p=0.50$); and normal achievement, 0.24 ± 0.97 ($p=0.23$). Scores were not significantly related to subject race, treatment with IV immune globulin or degree of coronary artery involvement. Older age was significantly related to higher scores for individual risk (eg. smoking, illicit drug use; $r=0.40$, $p<0.05$), peer influence ($r=0.45$, $p=0.03$), overall risk for injury or ill health ($r=0.40$, $p<0.05$), and lower scores for overall health status ($r=-0.60$, $p=0.002$), self-esteem ($r=-0.36$, $p=0.08$), and satisfaction ($r=-0.57$, $p=0.003$). **Conclusion:** While overall health status is normal, some domains indicate better than normal health status. Health status is unrelated to disease characteristics in this population, but there are trends towards lower health status with increasing age, which may reflect problems with adolescent adjustment.

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PARENTAL PERCEPTIONS AND EDUCATIONAL NEEDS CONCERNING KAWASAKI DISEASE

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Purpose: To determine factors associated with parental knowledge and concerns regarding Kawasaki disease (KD) in order to address misperceptions and educational needs. **Methods:** Self-administered questionnaire given at a follow-up clinic visit 6 to 8 weeks after the acute illness. **Results:** Over a 13 month period, surveys were completed by caregivers of 96 consecutive patients (mother in 76%, father 19%, other caregiver 5%). The median patient age was 3 years (range, 3 months to 15 years), 88% had been admitted to hospital (median duration 4 days) and 83% received IVIG. Respondents felt the diagnosis had been delayed in 50%. Only 13% had previously heard of KD before their child became ill. Level of concern or worry about KD was none in 1%, somewhat 14%, very 42% and extremely in 43%. The possibility of cardiac complications was not recognized by 14%. Information sources about KD included the pediatrician in 60%, family doctor 21%, and the internet in 50%. Internet use was significantly associated with increased respondents' level of education. Common concerns identified included the risk of recurrence, long-term follow-up and outlook, "what to look for", activity and restrictions, heart disease prevention, possible risks of IVIG and increased physician awareness about KD. Preferred educational aides included discussion with doctor in 76%, pamphlet 60%, video 52%, computer program 30% and discussion with nurse 10%. Factors associated with increasing level of concern included younger patient age and not having previously heard about KD. Level of concern was not related to respondent characteristics, perceived difficulties in diagnosis or sources of information used. **Conclusion:** To address important ongoing caregiver concerns about KD, a variety of educational sources should be offered which address specific concerns. Based on our study results, we have created and posted on our institutional web-site www.sickkids.on.ca a specific parent information program

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THE KAWASAKI DISEASE FOUNDATION: A PARENT ORGANIZATION IN THE UNITED STATES TO PROMOTE AWARENESS AND EDUCATION ABOUT KAWASAKI DISEASE

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In October 2000, a parent-based organization to promote awareness of Kawasaki Disease (KD) was formed in Boston, MA. The Kawasaki Disease Foundation is a national non-profit organization dedicated to (1) increasing awareness to promote early detection and treatment, (2) facilitating family support, and (3) raising funds for research. Some of the Foundation's current projects include a made-for-television documentary and educational video, appealing to the U.S. Congress to allocate funds to the Centers for Disease Control and Prevention to create a sentinel hospital surveillance program, managing a nation-wide network of trained support volunteers, and presenting regional educational conferences for families. The first family conference was the Kawasaki Disease Parent's Educational Symposium in Boston, MA in October 2000. Similar events are being planned for 2002 in Washington, D.C., and Milwaukee, Wisconsin. In contrast to Japan, where KD is a relatively common illness, parents in the United States perceive a great need to educate both lay and professional audiences about KD, its treatment, and potential sequelae. For more information, please visit www.kdfoundation.org.

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RISING INCIDENCE OF KAWASAKI DISEASE IN ENGLAND

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Kawasaki disease is the leading cause of acquired heart disease in children in the developed world. Although the aetiology remains unclear the incidence of Kawasaki disease has risen in Japan by over 50% between 1987 and 1998. There are no other reported national time-trend studies over the period of a decade. We examined 2215 emergency admissions to English hospitals for Kawasaki disease between 1991 and 2000. We found the incidence per 100,000 children under five doubled, increasing from 4.0 per 100,000 in 1991/92 to 8.1 per 100,000 in 1999/00.