

EDITORIAL

Nutrition in AIDS Management: An Opportunity Being Lost

SPECIAL COMMUNICATION

The Threat of Severe Acute Respirator Syndrome (SARS)

N Kissoon

ABSTRACT

Severe acute respiratory syndrome (SARS) is a recently recognized infectious disease associated with severe morbidity and mortality. It presents with non-specific signs and symptoms and because no definitive laboratory test is readily available, it poses a great risk to healthcare workers as well as difficulty in quarantine. The global response has been coordinated and enthusiastic in trying to understand and control this disease. Severe acute respiratory syndrome poses a great threat to the Caribbean because of easy and convenient travel and the vibrant tourist industry.

ORIGINAL ARTICLE

Provision of Anaesthesia for Porcine Cardiac Transplantation at the Veterinary School in Trinidad and Tobago

L Merritt-Charles, D Chen, C Legall, N Mootoo, S Brann, L Perrault, D Williams, C Thomas,

C Ezeokoli

ABSTRACT

The development of a local porcine model for cardiac transplantation posed many challenges. The organization of a team that had no expertise in the procedure, plus the need to obtain information, material and surgical support was a major concern. After extensive organization, analysis and planning a successful heterotopic cardiac transplantation was performed between sibling female Yorkshire Juvenile swine. Adequate pre-medication with azaperone and a smooth induction were ensured for both pigs, which were anaesthetized simultaneously with sodium thiopentone followed by endotracheal intubation and intermittent positive pressure ventilation. Inhalation anaesthetic agents were used for maintenance, neuromuscular blockade was achieved with cisatracurium and both fentanyl and tramadol were used to provide analgesia. Invasive monitoring was used in both the donor and recipient. Central venous pressure (CVP) was maintained at $>10\text{cmH}_2\text{O}$ and mean arterial pressure (MAP) $>60\text{mmHg}$. Heparin was injected during the surgical dissection of the heart in the donor to prevent coronary thrombosis and prior to aortic side clamping for end to side anastomosis of the donor heart in the recipient abdomen. After transplantation, the cardiovascular parameters of the recipient showed a MAP of 85-105mmHg and a CVP of 8-10 cmH_2O while echocardiography of the transplanted heart confirmed an ejection fraction (EF) of 80%. A functional anaesthetic team was assembled and trained to provide anaesthesia for porcine cardiac transplantation. The first successful local heterotopic cardiac transplant was performed on female Yorkshire swine. The transplanted heart suffered pump failure after 69 days and was excised for performance of tissue analysis.

Ultrasound Derived Fetal Growth Curves for a Jamaican Population

M Thame, C Osmond, H Fletcher, TE Forrester

ABSTRACT

The objective of this study was to to develop fetal growth curves and percentile growth charts for a Jamaican population. Four hundred and ninety-nine Jamaican women of African origin were enrolled in a prospective study from the antenatal clinic of the University Hospital of the West Indies, Kingston, Jamaica. Serial ultrasound scans were performed between 14 and 37 weeks gestation to measure fetal growth. The ultrasound measurements performed were biparietal diameter, head and abdominal

circumference and femoral length. A total of 2574 ultrasound scans were performed on the 499 women (mean 5.2 per woman). From these data, centiles for fetal growth curves for the four fetal measurements were constructed and percentile tables were created for a Jamaican population. Birthweight varies between ethnic groups and, therefore, so must fetal growth rates. At present, fetal growth in Jamaica is assessed using standards which are based on data from Shepard et al and Hadlock et al derived from Caucasian populations. Fetal growth curves using our data would more accurately identify a fetus that is at risk and hence, provide information which could improve obstetric care. These new growth curves should provide data, which will improve obstetric decision making.

Nutritional Status of Older Adults in Urban Jamaica

N Zohoori, M Jackson, R Wilks, S Walker, TE Forrester

ABSTRACT

The aim of the study was to determine the energy intake and nutritional status of a sample of Jamaican adults, and to compare them among different age groups. Measured height and weight data from a survey in Spanish Town, Jamaica, consisting of 2100 adults aged 25-74 years, with 22 per cent over age 60 years, were used to calculate body mass index (BMI). Using BMI cutoff points of 20 and 27, the prevalence of underweight and overweight, respectively, were determined for different age groups. Energy intake was calculated from a food frequency questionnaire from 967 of the respondents. Among males, mean daily energy intake declined from a high of 3681 kcal (15 401 kJ) for 25-29 year-olds, to a low of 2227 kcal (9318 kJ) for those aged 70-74 years. Corresponding numbers among females were 2935 kcal (12 280 kJ) and 1844 kcal (7715 kJ), respectively. Among those aged 65-74 years, 26.9 per cent of males and 50 per cent of females report daily energy intakes of less than 1600 kcal (6694 kJ) (below the lowest RDA), compared to 4.5 and 13.7 percent of males and females aged 25-34 years. While there are moderate declines in the prevalence of overweight, the prevalence of male underweight increased from 4 per cent among 50-54 year-olds to over 35 per cent among those 65 years and older; and among females the corresponding numbers are from 2 per cent to 10 per cent. All trends with age were significant ($p < 0.005$). There are significant declines in energy intake, and alarming increases in the prevalence of underweight with increasing age among males. These results are cause for concern and further research in this area is warranted.

Thermoluminescence Dosimetry in the Caribbean

CN Grant, GC Lalor, JE Thomas

ABSTRACT

The results of five years of radiation monitoring of 590 radiation workers in Jamaica and an additional 88 in Barbados and Turks and Caicos Islands show that the annual dose absorbed by Caribbean radiation workers is, with a single exception, well within the internationally accepted limits of 20 mSv per year. There have been few cases of relatively high exposures. The dose equivalent of the radiation workers by category agree with international trends; workers in nuclear medicine receive the highest doses and dental radiologists the lowest. The collective Effective Dose Equivalent has been calculated for each of the monitored populations and certain trends identified. The risk for development of fatal cancers from the occupational doses reported was very low. Consistent monitoring will identify aberrant conditions quickly and help maintain that record.

Pregnancy and birth Complications in patients with Schizophrenia in Trinidad and London

D Bhugra, G Hutchinson, M Hilwig, N Takei, TA Fahy, J Neehall, RM Murray

ABSTRACT

It has been shown that an excess of pregnancy and birth complications (PBCs) does not contribute to the excess rates of schizophrenia reported for the population of Caribbean origin in Britain compared with the native Caucasian British population. We therefore attempted to compare the rate of PBCs between a sample of schizophrenics in Britain with that of a sample from Trinidad where some of the Caribbean migrants to Britain originated. First contact patients with schizophrenia according to the CATEGO system diagnosis were identified in Trinidad and London. Their mothers, where available, were interviewed using the Lewis-Murray scale for pregnancy and birth complications. Data from Trinidad and Tobago concerning 56 patients were compared with those of the Caucasian (n = 61) and African-Caribbean (n = 50) patients in London (14.0%), though this difference was not statistically significant. These findings suggest that pregnancy and birth complications are a risk factor for a substantial minority of patients with schizophrenia reported for the Caribbean population in Britain are not due to these complications.

Suicidal Behaviour and Risk Factors in Children and Adolescents in Jamaica

AM Pottinger, PE Milbourne, J Leiba

ABSTRACT

Suicidal attempts and ideation were examined in children attending child and adolescent mental health clinics in the Kingston Metropolitan Area during October 1998 to September 1999. The case records of fifty-seven 6-18 year-olds were selected for review in order to identify social and familial factors that place the Jamaican children and adolescents at risk for suicidal behaviour. In addition, in order to examine the consistency of risk factors, data from child and adolescents mental health clinics were compared over a ten-year period between 1989-1999. The results indicated that having a poor relationship with the primary caregiver was significantly associated with suicidal behaviour ($p < 0.01$) as well as experiencing abuse ($p < 0.05$). These children also tended to externalize their behaviours ($p < 0.01$). These findings suggest that over the ten-year period, Jamaican children seem to be more readily talking about, contemplating and attempting, suicide. The importance of managing intra-familial issues affecting children is highlighted.

The Aftermath of a Disaster: Recovery Following the Volcanic Eruptions on Montserrat, West Indies

JG Avery

ABSTRACT

The people of Montserrat have experienced serious volcanic eruptions since the middle of 1995. These resulted in the evacuation of the capital town Plymouth in 1997. An exclusion zone was declared and two thirds of the original population of 10 324 migrated abroad. The remainder was left to initiate the recovery process. This paper reviews the action taken to maintain and then restore the health services and the health of the people. The recovery process is now well advanced and is following a characteristic pattern described as the Post Disaster Recovery Scenario. A new hospital was set up in the north of the island and the four remaining clinics refurbished. The health service was restored to a reasonable standard by the end of 2000. A Disaster Preparedness Team is kept on full alert to deal with any emergencies. The disaster caused serious disruption to the health services and to the way of life of the people. It had a number of adverse health effects which included immediate harm to respiratory health followed by other more serious problems such as mental illness, poor nutrition and violence. These were due to the disruption caused by resettlement, overcrowding, breakdown of family life and economic hardship. The lessons learned may be of benefit to countries experiencing similar events in the future.

Lymphoscintigraphic Evaluation of Chronic Lower Limb Oedema

O Khan, P Maharaj, R Rampaul, A Archibald, R Naipaul, N Loutan

ABSTRACT

Ultrasound, computed tomography (CT), magnetic resonance imaging (MRI), venography, lymphoscinti-graphy (LS) and contrast lymphography are frequently utilized in the evaluation of lower limb oedema but no clinical data from the Caribbean have been published on the role of LS despite its well-recognized clinical application. The successful clinical application of CT, colour Doppler sonography and MRI in differentiating the various causes of lower limb oedema is well understood. Lymphoscintigraphy has found less acceptability especially in the Caribbean where nuclear imaging techniques are now currently being developed. This paper describes the initial experience with this technique in 15 patients over a five-year period and discusses its value when lower limb lymphoedema is suspected. Scintigrams were analyzed for visualization of lymph vessels and lymph nodes, dilation of lymphatic vessels, collaterals and dermal back flow. Lymphoscintigrams were classified as normal (n = 5) or consistent with lymphoedema. In the remaining eight cases of secondary lymphoedema, a positive study based on altered lymphoedema. In the remaining eight cases of secondary lymphoedema, a positive study based on altered lymphatic flow and anatomy was recorded. An alternative explanation was offered in three out of five cases in which a normal lymphoscintigram was obtained.

Transverse Ureterotomy in Open Ureterolithotomy

LL Douglas, K Wedderburn, CA Rattray, CM Cadogan

ABSTRACT

Open ureterolithotomy is now a seldom performed operation but is still occasionally necessary. We report on the transverse ureterotomy (TU) in this procedure and its effect on reducing morbidity. Results from 100 cases of TU for stone disease since 1976 were compared with those from 50 ureterolithotomies using the standard longitudinal ureterotomy (LU) performed during the same period. The parameters considered were urinary leakage, length of hospital stay and ureteric narrowing as assessed on intravenous urogram at three months. The cases utilizing TU were associated with significantly less urinary leakage, a shorter hospital stay and no ureteric narrowing. Transverse ureterotomy for stone disease significantly reduces the morbidity associated with the operation when utilizing the standard LU. The fear of transecting the ureter may be overcome by good exposure and gentle careful dissection. We suggest that TU be used for open ureterolithotomy.

Issue in Bioethics: Teaching Research Ethics

DE Aarons

ABSTRACT

All research should meet the highest ethical and scientific standards, and so persons who may be involved in conducting research should be fully conversant with the relevant ethical principles of biomedical research and its requirements. Further, scientists, academicians, physician-researchers, student-researchers, and members of research ethics committees should be able to distinguish between therapy and research, evaluate risk and benefit, be sensitive to various forms of conflicts of interest, and be fully aware of the special provisions necessary for vulnerable populations. This article recommends a number of subject areas that should be addressed as a part of this academic process.

Integrating Spirituality in the Training of Medical Students: Needs, Possibilities and Experiences

EA Allen

ABSTRACT

In a review of the historical perspective and current changes in curriculum development at the Mona Campus of The University of the West Indies (UWI), Branday (1) points to the recent involvement of a multidisciplinary working group in planning the inclusion of non-academic criteria in the selection process of students and a refinement of the aims and objectives of undergraduate education reflecting changes in medicine's and society's expectations of the modern medical graduate. He noted the encouragement of greater integration in teaching across disciplines and greater responsibility being placed on students for their own learning. These broad humanistic changes are significant in preparing the University for addressing an equally important concern expressed by a final year medical student, P Griffith (2) with regard to the medical school teaching in relation to spirituality. He states that "it is long overdue that curriculum in the Faculty of Medical Sciences at The University of the West Indies be expanded to include this important facet of human health". In this paper, the author will examine the need for this inclusion, describe practical possibilities and report the experiences of medical student training programmes in the United States of America (USA).

The Sir George Alleyne Distinguished Symposium

To honour Sir George Alleyne, distinguished alumnus of the University of the West Indies (UWI), on his retirement as a Director of PAHO, held on November 6, 2002 at the Cave Hill Campus on the UWI

HIV/AIDS in the Caribbean: The Need for a More Effective Public Health Response

JP Figueroa

A more concerted effort is required throughout the Caribbean to mount an effective public health response to HIV/AIDS. In order to raise the level of response to the epidemic, appropriate social policies and legal framework need to be developed.

A Vision for Caribbean Health

GAO Alleyne

The vision for Caribbean health is one in which there is retention of the gains already made, steady improvement in the health of the people and no unjustified differences between segments of national populations, or indeed between the countries of the Caribbean. In order to realize the vision, we must deal with the epidemiological mosaic and address the needs for resources, services, and appropriate systems in the context of the main determinants of population health.

Research into Policy: Hypertension and Diabetes Mellitus in the Caribbean

TE Forrester

The Caribbean Ministries of Health and their technical partners are attacking the epidemic of obesity, hypertension and diabetes mellitus in the context of health promotion and health protection. Additional dimensions proposed comprise regional cooperation intersecting with global efforts in order to redirect policies for agriculture and trade in such a way that nutrition and health are at the centre of such policies.

VIEWPOINTS

Designer Babies: What are the Ethical and Moral Issues?

TK McGhie

Reproductive technology has profound potential benefit for the relief of suffering and for advancing the understanding of human evolution. Its potential may be thwarted without intense review and regard for ethical and moral issues.

Clinical Skills and Caring Professionals

N Kissoon

The teaching of clinical skills needs to be re-emphasized and should form the basis of a sound medical education. Good clinical skills are the hallmark of caring professionals and ultimately good medical practice.

Image and Diagnosis

Endometriosis Co-existing with Bilateral Dermoid Cysts of the Ovaries Treated by Laparoscopy

J Frederick, V DaCosta, S Wynter, I Tenant, C McKenzie, Y McDonald

ABSTRACT

Endometriosis co-existing with bilateral dermoid cysts of the ovaries is a rare occurrence although both benign conditions are said to be common in women in the reproductive age group. We present a case of a young woman with primary infertility associated with incapacitating dysmenorrhoea. Sonographic evaluation revealed bilateral ovarian cysts. Video-assisted laparoscopy was performed which revealed bilateral dermoid cysts and endometriotic deposits in the pelvis. The ovarian cysts were enucleated and the endometriotic deposits were endo-coagulated. The patient was treated with GnRH agonist for three months. There have been only two reports of benign and malignant teratomas co-existing with endometriomas.

Answer to Image and Diagnosis

MEDICAL STUDENTS' FORUM

The University of the West Indies Medical Students Receive International Awards for Research

SC Hemmings