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Non-Accidental Injuries Associated With Convulsions In Port Harcourt, Nigeria

Ifeoma Anochie, I. B. Graham-Douglas
Contact: the corresponding author Ifeoma Anochie · anochieify@hotmail.com

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ABSTRACT

Abstract (English)

A retrospective study of 50 children with convulsions in the past three years (Jan.1997-2000) was undertaken in University of Port Harcourt Teaching Hospital (UPTH), Southern Nigeria, to determine the prevalence and outcome of traditional remedies used as treatment of convulsions at home. Fourteen children were deliberately exposed to noxious substances including flame burns during convulsion. The mean age of these patients was 3.3 years (8 months-12 years). The male to female ratio was 1.3:1. Palm kernel oil was the commonest substance administered in nine (64.3%) cases. The complications from these harmful practices included aspiration pneumonia, chemical conjunctivitis, burns, wound sepsis and wound contractures. Health education of the public by health care practitioners and appropriate Government agencies is urgently needed to stress the implications of these harmful practices that amount to serious child abuse.

Abstract (German, Deutsch)

Eine zurückblickende Studie von 50 Kindern mit Krämpfen in den letzten drei Jahren (Jan.1997-2000) wurde in der Universität des PortKrankenhauses Unterrichten Harcourt (UPTH), des Südnigerias aufgenommen, um das Vorherrschen und das Resultat der traditionellen Hilfsmittel festzustellen, die zu Hause als Behandlung von Krämpfen benutzt wurden. Vierzehn Kinder wurden absichtlich schädlichen Substanzen einschließlich der Flammebrände während des Krampfes ausgesetzt. Das Mittelalter dieser Patienten betrug 3,3 Jahre (8 Jahre months-12). Der Mann zum weiblichen Verhältnis war 1.3:1. Palme Kernöl war die allgemeinste Substanz, die in neun ausgeübt wurde (64,3%) Fällen. Die Komplikationen von dieser schädlichen Praxis umfaßten Aspiration Pneumonie,

chemische Bindehautentzündung, Brände, Wundsepsis und Wundzusammenziehungen. Gesundheit Ausbildung der Öffentlichkeit durch Gesundheitspflegepraktiker und passende Regierungsagenturen wird dringend benötigt, um die Implikationen dieser schädlichen Praxis zu betonen, die ernsten Kindmißbrauch betragen.

Abstract (French, Française)

Une étude rétrospective de 50 enfants avec des convulsions en trois dernières années (Jan.1997-2000) a été entreprise à l'université de l'hôpital gauche d'enseignement de Harcourt (UPTH), du Nigéria méridional, pour déterminer la prédominance et les résultats des remèdes traditionnels utilisés comme traitement des convulsions à la maison. Quatorze enfants ont été délibérément exposés aux substances nocives comprenant des brûlures de flamme pendant la convulsion. L'âge moyen de ces patients était de 3,3 ans (8 années months-12). Le mâle au taux femelle avait 1.3:1 ans. L'huile de pépins de paume était la substance la plus commune gérée dans neuf (64,3%) cas. Les complications de ces pratiques nuisibles ont inclus la pneumonie d'aspiration, la conjonctivite chimique, les brûlures, le sepsis de blessure et les contractures de blessure. L'éducation sanitaire du public par des praticiens de santé et des organismes gouvernementaux appropriés est eue un besoin urgent pour soumettre à une contrainte les implications de ces pratiques nuisibles qui s'élèvent à l'abus sérieux d'enfant.

Abstract (Italian)

Italian Uno studio retrospettivo di 50 bambini con le convulsioni durante gli ultimi tre anni (Jan. 1997-2000) è stato intrapreso in università di ospedale port di istruzione di Harcourt (UPTH), de Nigeria del sud, per determinare la prevalenza ed il risultato dei rimedi tradizionali usati come trattamento delle convulsioni nel paese. Quattordici bambini sono stati esposti deliberatamente alle sostanze nocive compreso le ustioni della fiamma durante la convulsione. L' età media di questi pazienti era di 3,3 anni (8 anni months-12). Il maschio al rapporto femminile era 1.3:1. L' olio di granelli della palma era la sostanza più comune amministrata in nove (64,3%) casi. Le complicazioni da queste pratiche nocive hanno incluso la polmonite di aspirazione, la congiuntivite chimica, le ustioni, il sepsis della ferita e le contratture della ferita. L' educazione sanitaria del pubblico dai professionisti di sanità e dagli enti governativi competenti è necessaria urgentemente per sollecitare le implicazioni di queste pratiche nocive che ammontano ad abuso serio del bambino.

Abstract (Portuguese, Português)

Um estudo retrospective de 50 crianças com convulsions nos três anos passados (Jan.1997-2000) foi empreendido na universidade do hospital portuário ensinar de Harcourt (UPTH), de Nigéria do sul, determinar o prevalence e o resultado dos remédios tradicionais usados como o tratamento dos convulsions na HOME. Quatorze crianças foram expostas deliberadamente às substâncias nocivas including queimaduras da flama durante o convulsion. A idade média destes pacientes era 3,3 anos (8 anos months-12). O macho à relação fêmea era 1.3:1. O óleo de semente da palma era a substância a mais comum administrada em nove (64,3%) casos. As complicações destas práticas prejudiciais incluíram o pneumonia do aspiration, o conjunctivitis químico, as queimaduras, o sepsis da ferida e os contractures da ferida. A instrução de saúde do público por practitioners do cuidado de saúde e por agências de governo apropriadas é necessitada urgente forçar as implicações destas práticas prejudiciais que atingem o abuso sério da criança.

Abstract (Spanish, Español)

Un estudio retrospectivo de 50 niños con convulsiones en los últimos tres años (Jan.1997-2000) fue emprendido en universidad del hospital portuario de la enseñanza de Harcourt (UPTH), de Nigeria meridional, para determinar el predominio y el resultado de los remedios tradicionales usados como tratamiento de convulsiones en el país. Expusieron a catorce niños deliberadamente a las sustancias nocivas incluyendo quemaduras de la llama durante la convulsión. La edad media de estos pacientes era 3,3 años (8 años months-12). El varón a la relación de transformación femenina era 1.3:1. El aceite de núcleo de la palma era la sustancia más común administrada en nueve (64,3%) casos. Las complicaciones de estas prácticas dañosas incluyeron pulmonía de la aspiración, conjuntivitis química, quemaduras, sepsis de la herida y contracciones de la herida. La educación de salud del público por los médicos del cuidado médico y las agencias de estatal apropiadas se necesita urgente para tensionar las implicaciones de estas prácticas dañosas que asciendan al abuso serio del niño.

Keywords: Convulsions, traditional remedies, child abuse, Non accidental Injuries, burns, wound sepsis

Introduction

The expected benefits of medical intervention should outweigh the possible harm. Although, some parents and guardians occasionally adopt some interventions which are futile, harmful and with no pathophysiologic rationale[1-5]. In Nigeria, as in most other developing countries, parents or guardians still subject children to unorthodox treatment as first aid therapy in emergency conditions at home[1-4]. This may worsen the child's clinical conditions culminating in child abuse[6-8].

The best interest of the child is the fundamental ethical guideline in Paediatrics[5]. Parents are presumed to be the appropriate decision-makers for children especially at home. However, in developing countries, where the level of literacy is low and there are many cultural practices[9], parents may lack the capacity to make informed decisions in the management of their children at home. The present retrospective study was therefore designed to assess unorthodox treatment of convulsion at home among children admitted into our hospital in order to highlight the extent and implication of these treatments.

PATIENTS AND METHODS

The case files of children who had convulsions at home and were admitted into the children's emergency ward (CHEW) of the University of Port Harcourt Teaching Hospital (UPTH) over a 3 years period (1997-2000) were obtained from the medical records department of UPTH.

Relevant data extracted included age, sex, date of admission, duration of convulsions, the treatment received at home including history of ingestion and/or application of traditional concoctions or exposure to burns. The physical findings on admission, the results of cerebrospinal fluid analysis, complications from unorthodox treatment and outcome of hospital treatment were studied.

Non accidental injury (NAI) has been defined as an injury sustained (by children) through violence. As far as causation is concerned, a multitude of motives exist[1]. They are:

In families where abuse is transmitted through the generations (current paper), it may be quite easy to miss the NAI[2]. It is useful to remember that abuse is associated with unemployment, criminality, young motherhood, substitute fathers and bigger, more mobile, poorer families. A forensic practitioner examining the defendant must describe the injuries in detail, as well as hold a detailed interview both with the defendant as well as with the people who can throw more light on the relations of the defendant with the child. The forensic practitioner must keep these points in mind, when examining the defendant. In addition, he might do well to remember that many NAI may be culture based, as those highlighted here.

The current paper by Anochie describes an NAI, which seems to fall in category 2 of the above.

RESULTS

A total of 90 children were admitted with convulsions. However only 50 case notes could be retrieved and analysed.

Fourteen (28.0%) of the 50 children were exposed to harmful substances at home during episodes of convulsion. The gender distribution of the children was 8 (57.1%) males and 6 (42.9%) females (M:F 1.3:1). The ages of the children ranged from 8 months to 12 years (mean 3.3 years). Ten (71.4%) of the 14 patients were aged two years and below. The unorthodox treatments administered included palm kernel oil in 9 (64.3%) cases, herbal concoctions in 2 (14.3%), onion leaves in 2 (14.3%) and crude oil in 1 (7.1%) patient. These were given to the children to drink and some were forced into the orifices including the ears, eyes and nostrils. Flame burns were inflicted to the feet in 3 (21.4%) patients. One of these patients had second degree burns (fig 1).

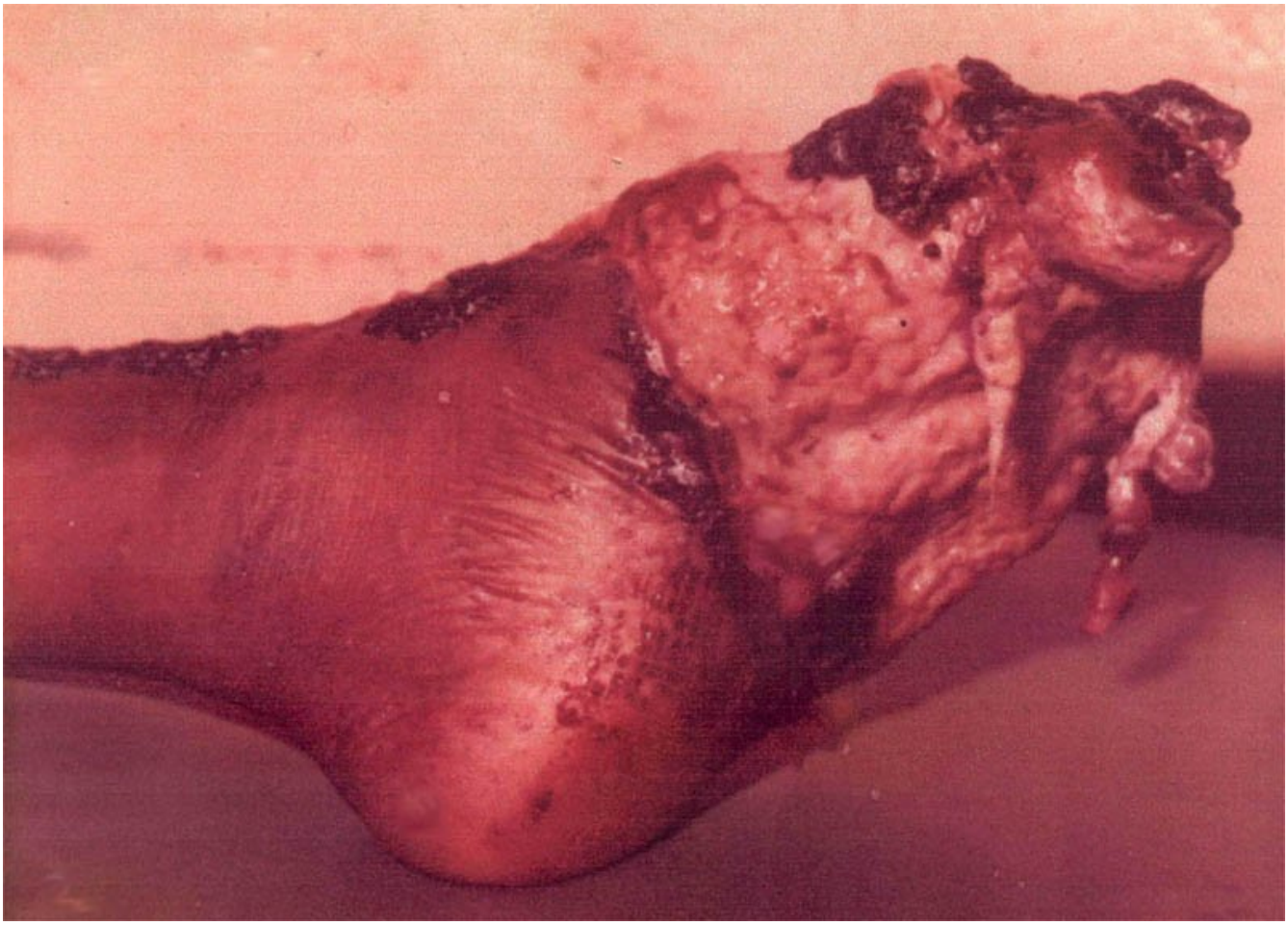

Figure 1: Flame burns with secondary infection during convulsion .

Laboratory investigations showed normal cerebrospinal fluid (CSF) results in 11 (78.6%) patients but these were abnormal in one patient. CSF analysis was not done in two patients. The duration of hospitalisation varied between 24 hours and eleven days (mean 4.1 days). All the patients except two were from low socio-economic class.

The complications arising from unorthodox treatments included aspiration pneumonia (7.7%), chemical conjunctivitis with bacteria conjunctivitis (7.7%), and wound sepsis in 2(14.3%) patients. One (7.1%) of the 14 patients died.

DISCUSSION

This present study showed that unorthodox treatments were given to 28% of children with convulsions at home. This is however lower than the rate of 48 percent reported in this hospital thirteen years ago[4]. This may be the result of Government's efforts to familiarize primary health care in Nigeria.

The traditional concoctions used in Nigeria vary with cultural practices. Palm kernel oil was the commonly administered remedy in this study. This was used either singly or in combination with crude oil and other substances. In western Nigeria, cow's urine concoctions (CUC) is commonly used for convulsions[1,3,10,11]. However, this was not administered to our patients although, onion leaves which is one of the components of CUC was used in 14.3 per cent of patients.

Palm oil and crude oil are volatile and therefore are easily aspirated into the lungs causing chemical pneumonitis. This complication was seen in 7.7 per cent of the cases. Chemical conjunctivitis with its potential of causing blindness resulted from instillation of these substances into the eyes.

The flame burns occurred only in children less than two years of age, and was complicated by wound infection in two cases. This may be due to contamination of the wound by firewood or cross - infection from hospital patients who are managed in an open ward with burn cases.

The normal CSF result found in 78.6% of the patients suggests that the primary problem was febrile convulsion. Febrile convulsion is generally considered benign with a favourable outcome in developed countries[12,13]. However, 8 (57.1%) of these patients ended up requiring extensive antibiotics therapy with loss of money, school hours and increased morbidity and deformity as a result of unenlightened interventions at home.

These harmful unorthodox treatments by parents or guardians constitute child abuse. The Federal Government has promulgated children's decree in 1973 in which infliction of injuries on a minor is regarded as criminal offence[14]. Unfortunately this decree has not been enforced.

We recommend mass education by health care practitioners and appropriate Government agencies to enlighten the public about simple methods of managing convulsions at home. The use of traditional remedies such as palm oil, crude oil, onion leaves and flame should be publicly condemned and discouraged. Furthermore, the Government should enforce the children's decree in order to control all harmful practices. The physicians may need to initiate legal proceeding to override parental decisions that severely violate the best interest of the child.

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