Letters to the Editor

Paraffin Poisoning in Children. What can we do differently?

To the editor: I looked forward to reading the article by Malangu, et al[1], given the prospect of new management findings to this common problem. My interest was further stirred by a recent tragedy of two young girls (aged 11 and 12) committing suicide by paraffin ingestion. They presented late in comma and severe pneumonia. However your research seems to pertain exclusively to accidental poisoning. Have there been any reports of deliberate paraffin ingestion in your sample?

Due to small amount (1ml) of this low viscosity aliphatic-based hydrocarbon that is needed to produce chemical pneumonitis and the fact that respiratory symptoms and complications may take up to eight hours to develop, is it not advisable to admit and monitor these children for at least one day considering that most people live far from any immediate medical assistance in our country? Being in private practice I would not send these children home.

Is there anything else, apart from decreasing prophylactic antibiotic use in children with paraffin poisoning that we, as doctors can do differently? It would have been good to read about other management approaches that doctors may have been using, either correctly or incorrectly, in instances of paraffin ingestion. These would include the use of milk, gastric lavage, activated charcoal, steroid use, oxygen use, IV fluids and chest x-rays.

If your research sought to answer the question of what doctors can do differently regarding paraffin poisoning, I feel that only 2 areas of management have been investigated; that of antibiotic use and admission to hospital policies. It suggests that doctors are managing accidental paraffin poisoning in children adequately as regards other management areas.

As there has been no mortality or major morbidity during the period studied, is it then not fair to conclude that doctors are managing this problem adequately at Philadelphia Hospital?

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RESPONSE

Thank you for your letter to the Editor on our article: Paraffin Poisoning in children. What can we do differently?[1]

Our sample was mainly children below the age of 5 years (91% of total). They were all reported as "accidental" paraffin poisoning. The purpose of the study was to describe the occurrence, health cost and management of paraffin poisoning in a rural hospital. Your concern on observing the children for at least one day is valid. In our study the patients were not sent home as the average length of stay was 2.5±2 days. We raised the concern that 2.5 days maybe longer than expected bearing in mind the low severity and zero case fatality rate reported in the study. The other management approaches you alluded to are relevant but they were not assessed in our study. Our study did not suggest that doctors are managing accidental paraffin poisoning in children adequately as regards the other management areas. The purpose of the study was quite clear in this respect. We hope that other studies will focus on these areas of management mentioned in your letter to provide answers to your concerns. It is quite clear that this study was concerned with the health cost and the number of drugs prescribed, especially the use of antibiotics.

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Attention Deficit Disorder (ADD)

To the editor: I read the press release on ADD in SA Fam Pract 2005;(47) 8 page 40 with great interest. There has been tremendous misunderstanding about ADD and few people recognize the devastating impact that ADD can have on the life of a child, and of everyone in his family. Even fewer recognize or understand the positive impact upon ADD of supplementation of essential fatty acids (EFA's) coupled with dietary intervention to optimize their metabolism.

ADD is the result of a metabolic defect which can be linked to a dietary deficiency. Careful examination and questioning will reveal that the child has clinical signs and symptoms over and above his tremendous hyperactivity.

- The following clinical signs and symptoms often emerge:
- They are usually boys
- They are allergic, even to their own mother's milk,
- They are colicky
- They often have grommets
- There is dry skin and eczema
- They have a remarkable hyperaccusis and sensory defensiveness; they shy affection
- They do not sleep
- They auto-mutilate themselves
- There are significant and fine co-ordination disturbances
- They have an unquenchable thirst without concomitant polyuria.

These signs and symptoms (and many more) all combine to make life so difficult for the child that the result is often an overwhelming psychological dysfunction that overrides all other symptoms. The parents of such children go through hell and are driven to the end of despair. Medication usually offers relief but it does nothing to or for the basic metabolic defect.

ADD children have an inability to metabolise fatty acids to prostaglandins. Linoleic acid, an essential fatty acid, is converted by the enzyme delta-6-desaturase to gamma-linolenic acid….This is the site of the problem for these children. Bypassing the deficiency by giving them Gamma-linolenic acid orally corrects the deficiency: the thirst decreases and stops and the allergies are ameliorated. The hyperactivity ceases and behaviour normalizes. If needed, psychological help may undo the damage as a result of the overwhelming dysfunction in many areas.

In the case of type 1 diabetes the disease is corrected by supplying the body with insulin. In hypothyroidism, the disease is corrected by providing thyroid hormone. Likewise in ADD the disease is corrected by providing the body with the lacking fatty acid which is gamma-linolenic acid (GLA).

Colquhoun and Brundy[1] suggested in 1981 already that lack of fatty acids are the possible cause of ADD in children. Since then the British Hyperactive Children's Support Group (HACSG) has been advocating the use of GLA for ADD. Other articles indicating lower levels of fatty acids in hyperactive children are: Mitchell, Lewis, Cutler[2] and Zental, Deck Abate et al [3] Other articles are by Amman, Mitchell and Turbot.[4] They found GLA treatment less effective but only used it for 4 weeks. Arnold, Kleykamp, Votolato, Taylor, Kontras and Tobin[5] found likewise but also treated only for 4 weeks which is too short a time. Another article is by Blackburn[6]. One sees a remarkable change in ADD children once GLA is stared and sometimes it is possible to stop the medication.

Harding, Judah and Gant[7] compared treatment with Ritalin to dietary supplementation with vitamins and fatty acids. The results support the effectiveness of food supplement treatment in improving attention and self-control in children with AD/HD and suggest that food supplement treatment of AD/HD may be of equal efficacy to Ritalin treatment.

The Attention deficit and Hyperactivity Support Group of Southern Africa have been advocating GLA in ADD for at least 16 years. They have also included omega three fatty acids which have in recent years demanded much attention.

I strongly suggest that every child with ADD goes onto a substitution of at least 6 grams of GLA per day for at least 8 weeks. This is achieved by providing at least 6ml of evening primrose oil by mouth. Depending upon the symptoms the relevant omega three supplementation can be added.

I also suggest that parents join the Support Group which will provide them with dietary advice and other support measures. The number is 011-886-7668 (Mrs Picton)

I am the father of a severely affected ADD son and have been studying and working with this condition for at least 30 years. I am presently the medical advisor for Attention Deficit and Hyperactivity Support Group of Southern Africa.

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