Rational Therapy

Too many vitamins for diabetics
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A study in Alkhobar, Saudi Arabia, indicates that multivitamins are commonly prescribed on a routine basis for patients with diabetes mellitus. There is no scientific justification for this practice, which unnecessarily increases the cost of care, and doctors should be advised against it.

The prescribing of multivitamins for patients with diabetes mellitus was studied during 1994 in the Saudi Arabian town of Alkhobar, where there were eight primary care centres at which 1474 diabetic subjects aged 15 years or more were registered. Systematic sampling was used to assign 162 of these people to the study, and 139 non-diabetic controls were selected at random from lists of patients with other chronic diseases. There were no significant differences between the diabetics and the controls with regard to age, gender and nationality. Data on the diabetic subjects and controls, including details of multivitamins issued, were retrieved from medical records, while information on doctors was obtained from self-administered questionnaires.

Multivitamins were prescribed for 71 diabetics (44%) but for only 30 controls (22%). Of the 107 diabetics who were managed with anti-diabetic drugs, 61 (57%) received multivitamin prescriptions, whereas among the 55 diabetics managed by diet alone only 10 (18%) were given multivitamins.

The approximate mean annual costs of multivitamins for diabetic subjects and controls were US $3.50 and $0.75 respectively. Among the diabetic subjects the costs were higher for those given antidiabetic drugs than for those managed by diet alone, the corresponding values being approximately $5.00 and $1.00.

Of the 39 primary care doctors who participated in the study, 25 believed that multivitamins were beneficial to patients with diabetes mellitus; 21 of these doctors thought that multivitamins were of value in both types I and II of the disease; 28 doctors actually prescribed multivitamins for diabetic patients. It was thought by 12 of the doctors that multivitamins delayed the development of neurological complications, while 23 considered that they relieved the symptoms of neuropathy; 15 were of the opinion that multivitamins helped to reduce the side-effects of oral hypoglycaemic agents, and three considered that they had only a placebo effect.

Whereas 15 of the 16 female doctors (94%) prescribed multivitamins for diabetic subjects, only 13 of the 23 male doctors (57%) did so.
Multivitamins were prescribed by 19 of the 29 doctors (66%) who had been working for less than five years in primary care and by 9 of the 10 (90%) who had been engaged in this field for longer periods. Notwithstanding the small number of doctors questioned, this indicates the possibility that a particularly large proportion of those in the latter category had failed to update their knowledge concerning the management of the condition. Continuing medical education for doctors in this regard is undoubtedly desirable.

There is no evidence in the literature suggesting that routine prescribing of multivitamins is of value in cases of diabetes mellitus. The practice is likely to convey a false health message to patients, leading them to believe that long-term benefit can be derived from it and encouraging them to purchase these products over the counter from private pharmacies. Furthermore, it increases the cost of treatment quite unnecessarily: the results outlined above, if projected to take account of all the registered cases of diabetes mellitus in the area of study, suggest an annual cost of some $5000 for multivitamins.

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**Diarrhoea: how much fluid and how often**

Provide more fluid than usual. The general rule is to give the child as much fluid as he or she wants and to continue using oral rehydration therapy until diarrhoea stops. Remember that a child under 2 years of age cannot ask for something to drink; however, irritability and fussy behaviour are often signs of thirst. Young children must be offered fluids to determine whether they are thirsty and want to drink. When a child no longer accepts fluid, it is usually because enough has been taken to replace the losses caused by diarrhoea. Infants should be allowed to breast-feed as often and for as long as they want...

Show the mother how to measure the approximate amount of fluid to be given after each loose stool using a cup or some other container available to her at home (or that she can take home). Explain that the fluid should be given by teaspoon to children under 2 years of age: a teaspoonful every 1–2 minutes. Feeding bottles should not be used. Older children should take the fluid directly from a cup, by frequent sips. If vomiting occurs, the mother should stop giving the fluid for 10 minutes and then start again, but give it more slowly, e.g., one teaspoonful every 2–3 minutes.

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