Benylin (dextromethorphan) abuse and mania

Drs JOSEPH WALKER and LAKSHMI N YATHAM (Nova Scotia Hospital, Dartmouth, Nova Scotia, Canada) write: In 1990 Benylin DM was reformulated as a single entity cough suppressant containing only dextromethorphan, which is described as having no analgesic or addictive properties.[1] Cases of dextromethorphan abuse and dependence have, however, been reported[2-4] as well as a case of toxic psychosis and exacerbation of pre-existing schizophrenia.[4,5] We report a case of recurrent mania associated with abuse of dextromethorphan.

A 40 year old man was admitted with a two week history of manic symptoms. On inquiry we discovered that he had been using Benylin DM 100 ml or more regularly for about eight years. At times of stress his intake increased to 400 ml daily, at which point he invariably became manic. This had led to admission on one occasion before 1990, when Benylin DM also contained diphenhydramine, and on three occasions subsequently, after he had taken Benylin DM containing dextromethorphan only. He rapidly settled down with small doses of haloperidol on each occasion with return to premorbid level of functioning.

Mania (organic mood syndrome) secondary to Benylin DM abuse was provisionally diagnosed, and he was treated with small doses of haloperidol with rapid resolution of symptoms. While in hospital, however, he experienced craving for Benylin DM, which he obtained and ingested, with prompt return of manic symptoms; these abated within two to three days. He has had one further episode of mania since, again associated with excessive ingestion of Benylin DM.

Although psychosis has been described associated with both normal use and abuse of non-prescription cold medications,[4-7] this is the first report of a case of mania associated with a non-prescription cold remedy whose sole constituent is dextromethorphan. It is not clear how dextromethorphan brings about mania, but we draw attention to the abuse potential of this over the counter medication.

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Hypercalcaemia associated with calcipotriol (Dovonex) treatment

Drs K A HARDMAN, D A HEATH (Queen Elizabeth Hospital, Birmingham B15 2TH) and Dr H M NELSON (Burton General Hospital) write: Calcipotriol ointment has recently been introduced for the treatment of psoriasis. Structurally similar to 1,25-dihydroxy vitamin D_3, it is 100 times less potent in its effects on calcium metabolism, and at doses of up to 100 g weekly for not more than six weeks it is said not to cause hypercalcaemia.[1] We have recently seen two patients who did develop hypercalcaemia with calcipotriol therapy.

Case 1—A 59 year old woman with a 20 year history of psoriasis, refractory to coal tar and ultraviolet light, was treated with calcipotriol. After six weeks she had applied a total of 500 g. Her serum calcium concentration rose from 2·42 mmol/l (normal 2·15-2·51) on day five of treatment to 2·59 mmol/l two weeks after cessation of therapy. The serum calcium value subsequently fell to normal, but the psoriasis relapsed.

Case 2—A 68 year old Asian man with extensive psoriasis refractory to coal tar and ultraviolet light was treated with calcipotriol. Before treatment his serum calcium concentration was 2·35 mmol/l (normal 2·20-2·60). Eleven weeks later, after he had applied a total dose of 770 g, his calcium was 2·72 mmol/l. Investigation of the hypercalcaemia revealed the use of calcipotriol, which was stopped. While the serum calcium returned to normal the psoriasis relapsed. As the calcipotriol had been the most effective treatment the patient had received he requested further treatment. This was carefully reintroduced at a dose of 10 g/day. The serum calcium concentration remained normal until the 16th week, when it rose to 2·9 mmol/l. Despite being asked to stop treatment the patient continued it for a further five weeks, when he was admitted with symptomatic hypercalcaemia, which rapidly disappeared once treatment was stopped.

Hypercalcaemia has been reported after application of calcipotriol under occlusion in the treatment of breast cancer[2] and with doses exceeding the maximum recommended amount.[3] Our first case indicates that hypercalcaemia can occur with doses that do not exceed the recommended amount or, as in the second case, are only slightly above. It would therefore seem prudent to monitor serum calcium during treatment and to make sure that excessive therapy is prevented.

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Low back pain associated with anistreplase

Drs J LEAR and R RAJAPAKSE (Leicester General Hospital, Leicester LE5 4PW) write: Six cases of low back pain have been reported after streptokinase infusion (1·5 million units),[1-3] four after anistreplase,[4] and a further eight after anistreplase have been reported to the Committee on Safety of Medicines. We report a further case of low back pain related to anistreplase.

A 53 year old man presented with a four hour history of crushing central chest pain, excessive sweating, and nausea. He was taking aspirin 75 mg once daily, enalapril 5 mg twice daily, isosorbide mononitrate 20 mg twice daily, and atenolol 50 mg once daily. On examination his pulse was 70 per minute; peripheral pulses were present and equal; blood pressure was 120/86 mm Hg in his left arm and 150/90 mm Hg in his right. There were bilateral crepitations in the lung bases. The electrocardiogram showed Q waves in leads V2,3,4 and ST segment elevation in leads V1,2,3. The chest radiograph and cardiac enzyme values were normal. The white cell count was $9{\cdot}2\times10^9$/l. In the absence of any contraindications, he was given anistreplase 30 units intravenously over four minutes.

Ten minutes afterwards he developed severe low back pain. His pulse was 110 per minute and there was no change in the blood pressure or peripheral pulses. There was no abdominal or lumbar tenderness. He was given two co-proxamol tablets and the pain disappeared. The next day there was new T wave inversion anterolaterally on the electrocardiogram, and myocardial infarction was diagnosed, although the next two sets of cardiac enzyme measurements were normal. He recovered uneventfully and was discharged a week later. No specific treatment for an allergic reaction was given.

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Interstitial pneumonitis and interferon-alfa

Drs T KAMISAKO, Y ADACHI, J CHIHARA, and T YAMAMOTO (Kinki University School of Medicine, Osakasayama, Osaka 589, Japan) write: Interferon is effective in treating chronic viral hepatitis,[1,2] but it causes side effects attributable to immunological responses, notably autoimmune thyroiditis.[3] We report a case of interstitial pneumonitis that developed in the course of treatment with interferon-alfa for chronic hepatitis C.

A 60 year old Japanese woman was diagnosed as having chronic hepatitis C. Administration of interferon alfa-2b was started on 7 May 1991 ($3{\cdot}0\times10^6$ units intramuscularly three times a week). After eight weeks (4 July) interferon treatment was stopped (total dose $72{\cdot}0\times10^6$ units) because of a fever of about 37·5°C, a severe dry cough, and decreased PaO_2. A chest radiograph showed bilateral reticulonodular shadows mainly at the bases. Respiratory infections were carefully ruled out. She was negative for antinuclear antibody. Histological studies showed interstitial pneumonitis with mononuclear cell infiltration to alveoli. Bronchoalveolar lavage fluid contained an increased number of lymphocytes (46% of total cells, T cells 81·2%, B cells 1·6%, ratio of CD4 to CD8 cells 0·70), which were sensitised to interferon alfa-2b as determined by ^{3}H-thymidine incorporation (stimulation index 8·0). Six weeks after the end of interferon treatment the respiratory symptoms disappeared. The lung shadows on the chest radiograph began to clear and the number of lymphocytes in bronchoalveolar lavage fluid fell to 15% of total cells.

Interstitial pneumonitis is a known side effect of some drugs (such as gold salts[4]) caused by hyperimmunity, but interferon induced pneumonitis has not been reported. In our patient a sharp increase in the number of lymphocytes was found in the peripheral alveolar region, and these were sensitised specifically to interferon alfa-2b. This finding indicated that interferon alfa-2b was a cause of interstitial pneumonitis.

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