note that prolonged survival has been reported after extended resection in a case of colonic

cancer requiring abdominal wall reconstruction.¹¹

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Fatal bronchospasm after oral ingestion of isphagula

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Summary

We report the case of a 40-year-old asthmatic who suffered fatal bronchospasm following oral ingestion of a laxative containing isphagula.

Keywords: asthma, bronchospasm, isphagula

We describe a case of fatal bronchospasm following oral ingestion of isphagula. It is well established that bronchospasm associated with occupational asthma can occur after inhalation of isphagula and that anaphylaxis can occur after oral ingestion of isphagula and psyllium. However, fatal anaphylaxis after oral ingestion of isphagula has never been reported.

Case report

A 40-year-old man, known to be asthmatic, was taken to the Accident and Emergency department as a priority call. He was first diagnosed as being asthmatic in 1986 and his symptoms were controlled with inhaled salbutamol and beclomethasone dipropionate.

He had had two previous hospital admissions, the first precipitated by the ingestion of a single tablet of aspirin, the second by ibuprofen. On both occasions he had severe bronchospasm requiring admission to the Intensive Care Unit, although ventilation was not required.

According to his wife, the evening prior to admission he had felt wheezy and had taken nebulised salbutamol at home.

In the morning he had no respiratory symptoms but had taken Fybogel as he had been unable to open his bowels for several days. He had previously taken this with no abnormal sequelae. When his wife left for work at 07.15 h he was entirely well. Following the ingestion of one sachet (3.5 g) between 07.30 h and 09.30 h he became acutely short of breath and was noted by his family to be wheezy. He took nebulised salbutamol which had no effect and an ambulance was called. He then had a cardiorespiratory arrest and, in spite of full resuscitative measures in the Accident and Emergency Department, he died at 11.00 h.

At *post-mortem* examination the epiglottis and larynx were normal; the upper airways contained a small amount of mucus and the lungs were found to be severely congested with blood with evidence of acute pulmonary oedema. It was thought that these findings were consistent with acute hypoxia due to sudden onset of severe bronchospasm.

Discussion

Fybogel is a laxative preparation, the main constituent being isphagula husk. This itself is derived from the dried seeds of *Plantago ovata*, and there is evidence that this can induce asthma, bronchospasm, and even anaphylaxis.¹

Psyllium (USP) which is used as a laxative in America is derived from a combination of the dried seeds of *Plantago ovata* and *Plantago psyllium* and this has also been shown to cause bronchopasm.

Sensitisation probably occurs through

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Learning points

- oral ingestion of isphagula may cause fatal bronchospasm
- significant sensitivity to laxatives must be recognised

inhalation of the powder and has been demonstrated in those individuals who suffer long-term exposure, usually employees in manufacturing plants and healthcare workers. Marks² demonstrated that 7.6% of employees in an exposed workforce were allergic to isphagula. Symptoms were particularly referable to the upper airways. There is one report of a previously sensitised nurse suffering severe anaphylaxis after ingesting a bowl of psyllium-containing cereal,³ and three cases of milder symptoms in individuals who took prescribed psyllium-containing laxatives.^{4,5} There have

been no previous reports of Fybogel-associated death.

This patient had no exposure to non-steroidal anti-inflammatory drugs on the day of the fatal episode, but the *post-mortem* findings are consistent with rapid onset of fatal bronchospasm, since the classical findings in asthma of enormous dilatation of the lungs with air and the presence of tenacious mucus plugs were absent. This implies that the patient's asthma was quiescent at the time. Although uncommon, the possibility of allergy to seemingly harmless laxatives should be recognised. It is not known whether sensitivity to aspirin and non-steroidal anti-inflammatory drugs is associated with sensitivity to laxative substances. In particular, patients who have ingested isphagula previously are at risk of becoming sensitised and thus developing severe bronchospasm due to anaphylaxis.

We have reported this case to the Committee on Safety of Medicines via the yellow card system.

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