Dr Nathan Tucker’s Asthma Specific: a treatment for asthma preceding inhaled steroids and beta-agonists

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Abstract

We present the case of an 83-year-old woman who was diagnosed with bronchial asthma in 1929 and had been treated in her childhood with “Dr Nathan Tucker Asthma Specific”, a cocaine-based aerosolised asthma treatment.

Case report

Ms C, 83-year-old-woman, was admitted with acute shortness of breath, following a recent viral respiratory illness. She was dyspnoeic at rest, with widespread expiratory wheeze throughout both lungs fields. Symptoms were consistent with previous asthma exacerbations. Ms C was treated with nebulised salbutamol and a tapering course of prednisone, with rapid resolution of symptoms.

Ms C provided an interesting personal account of the colourful history of early asthma treatment. Her asthma had been diagnosed in her infancy, in 1929. She recounted being treated in her childhood with a yellow power (which she believes was possibly sulphur) which was ignited and inhaled. In her early teenage years, her family ordered “Dr Nathan Tucker Asthma Specific” from America (see Figure 1). She describes this medication as providing “wonderful relief” for mild to moderate exacerbations of asthma, however she still required adrenaline for severe attacks.

Figure 1. Advertisement for Dr Nathan Tucker’s “Asthma Specific”
Ms C stated that the “Dr Nathan Tucker Asthma Specific” was removed from the market because of its cocaine content. She recalled using another aerosolised medication for a brief period, before the inhaled corticosteroids and beta-agonists became available.

Discussion

Nathan Tucker (1838–1920) was an American physician (reportedly an asthma sufferer himself) who developed the “Dr Nathan Tucker Asthma Specific” in 1889.¹ This was an aerosolised preparation containing 1–3.5% cocaine.¹ Several contemporary asthma treatments also contained cocaine, some at considerably higher percentages—“Azma-Syde” containing 40% and “Ryano's Hay Fever-n-Catarrh Remedy” at 99.95%.¹²

It is unclear when the “Asthma Specific” was completely removed from the commercial market. The medical community became aware of the dangers of such preparations in the early 20th Century.² A case of cocaine poisoning following the use of the “Asthma Specific” was documented in the Lancet in 1908.²³ Despite this, Ms C’s family were still able to mail-order the “Asthma Specific” in the 1930s.

Cocaine inhalation, the smoking of freebase “crack” cocaine, has been documented to cause acute bronchospasm,⁴ and is associated with asthma exacerbation.⁵ Other respiratory complications associated with chronic cocaine inhalation include, emphysema, pulmonary hypertension alveolar haemorrhage and pulmonary fibrosis.⁶ The cocaine amount and effect in the “Asthma Specific” will be considerably less that of “crack” cocaine. However the “wonderful relief” that Ms C felt was more likely related to cocaine euphoria rather than any physiological effect on the airways.

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References: