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TYPE: Article CC:CCL

JOURNAL TITLE: Indian Journal of Chest Diseases & Allied Sciences

USER JOURNAL TITLE: Indian J Chest Dis Allied Sci

ARTICLE TITLE: Di-iodohydroxyquinoline in the treatment of bronchopulmonary aspergillosis

ARTICLE AUTHOR: Malik, S. K. et al

VOLUME: 22

ISSUE: 3

MONTH:

YEAR: 1980

PAGES: 190-191

ISSN: 0377-9343

OCLC #:

Processed by RapidX: 10/25/2021 12:05:35 PM

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DI-IODOHYDROXYQUINOLINE IN THE TREATMENT OF BRONCHOPULMONARY ASPERGILLOSIS

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SUMMARY

Five patients suffering from allergic bronchopulmonary aspergillosis were treated with di-iodohydroxyquinoline—1200 mg per day for 3 weeks. Clinical improvement occurred in all the five patients, including reversion of sputum cultures to negative. Di-iodohydroxyquinoline needs further evaluation in patients suffering from pulmonary aspergillosis.

INTRODUCTION

Allergic bronchopulmonary aspergillosis is not an uncommon disease (Malik, 1977). The treatment for most cases is administration of corticosteroids which effectively suppress Type I as well as Type III reactions caused by *Asp. fumigatus* in the lung. However, symptoms of the basic disease tend to recur once the steroids are withdrawn. Antifungal drugs like amphotericin, iodides and pimaricin have been tried to eradicate the fungus but the response is variable. Jesiotr, (1973) reported 'cures' in three patients of aspergillosis pneumonia with antimoebic drug emetine hydrochloride 60 mg daily for 10 days. After treatment the chest radiograph cleared, sputum cultures became sterile and fungal serology converted to negative. Subsequently, Horsefield, Nicholos, Cummings, Hume and Prowse (1977), reported their successful experience in 13 cases of allergic aspergillosis. The latter authors, instead of emetine, used di-iodohydroxyquinoline in a dose of 1500-1800 mg per day for three weeks. The clinical response to treatment was striking. In 10 patients respiratory symptoms ameliorated considerably, previously positive sputum cultures of *Asp. fumigatus* became negative, even serum precipitins converted to negative in 12 patients. During this period when the clinical study reported by Horsefield *et al.* became available, we had a group of patients of allergic bronchopulmonary aspergillosis in our follow-up. These patients were on steroids and showed variable response. Five of these patients were given di-iodohydroxyquinoline who showed good response to the drug; the observations, are reported here.

Case material. There were five patients (3 males, 2 females) whose ages ranged between 13-48 years. All the five patients had symptoms of moderately severe asthma with duration varying from one to more than six years. All had positive history of atopy and had

additional complaints like chronic expectoration (3), expectorator of brown black viscid plugs (5), haemoptysis (2) and recurrent pulmonary infections (3). Chest skiagrams revealed recurrent pulmonary infiltrates in 4 patients who had chronic disease. In one patient the pulmonary infiltrate was detected in its initial stages and treatment was also given as soon as the diagnosis was confirmed. Laboratory investigation revealed blood eosinophilia, positive sputum cultures repeatedly for *Asp. fumigatus*, positive intracutaneous reactions to aspergillin and specific precipitation bands against *Asp. fumigatus* (gel diffusion method) in all the five patients. Di-iodohydroxyquinoline (Di-iodoquin) 1200 mg per day in three divided doses was given to all the patients for 3 weeks.

Clinical course. Subsequent to the administration of di-iodohydroxyquinoline the clinical course was striking in all the patients. In 3 out of 5 patients there was complete relief from wheezing; two other patients showed improvement in dyspnoea and wheezing. Chronic expectoration, however, persisted in 2 patients because the disease had been of longstanding duration; both showed extensive bronchiectasis on bronchography. It was possible to withdraw steroids in 4 out of 5 patients of asthma. Laboratory data in all the five patients showed negative fungal cultures of sputum and in 3 patients even the specific precipitins were found absent on repeat tests.

Comments

This limited study showed beyond doubt that respiratory complaints in patients with allergic bronchopulmonary aspergillosis were considerably relieved after a course of di-iodohydroxyquinoline therapy. In fact clinical and laboratory improvement was sustained in 3 patients for upto 24 months of follow-up. The present observations confirm the findings reported in the literature. Further trials of therapy need to be carried out to evaluate the above findings more critically.

REFERENCES

- Jesiotr, M. (1973) Treatment of aspergillosis with emetine hydrochloride. *Scand. Jour. Resp. Dis.* **54**, 326.
 Horsefield, K., Nicholos, A., Cummings, G., Hume, M. and Prowse, K. (1977) Treatment of pulmonary aspergillosis with di-iodohydroxyquinoline. *Thorax*, **32**, 250.
 Malik, S. K. (1977) Allergic bronchopulmonary aspergillosis. *Bulletin P.C.I. (Chandigarh)*, **11**, 107.