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COMBINATION USE OF ITRACONAZOLE AND ORAL STEROIDS IN MANAGMENT OF ALLERGIC BRONCHOPULMONARY ASPERGILLOSIS (ABPA): EXPERIENCE FROM KALYANA KARNATAKA REGION.

Respiratory Medicine

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KEYWORDS

INTRODUCTION

Allergic bronchopulmonary aspergillosis (ABPA) is a type 1 hypersensitivity reaction caused by spores of aspergillus fungus colonizing the airway in susceptible person. It is believed that globally there are about five million cases of ABPA, with India alone accounting for about 1.4 million cases[1]. It complicates 1- 2% of persistent asthma and 7 to 14% of cases of steroid dependent asthma. Many of them are diagnosed as uncontrolled asthma unless worked up for ABPA.

METHODS

In this article we share our experience with management of 15 cases of confirmed ABPA in pulmonology specialty OPD in kalyana Karnataka region from the period of jan 2023 to sept 2023.

Inclusion Criteria

As per ISHAM criteria for ABPA

Exclusion Criteria

All those not giving consent, and patients taking steroid or itraconazole and voriconazole therapy

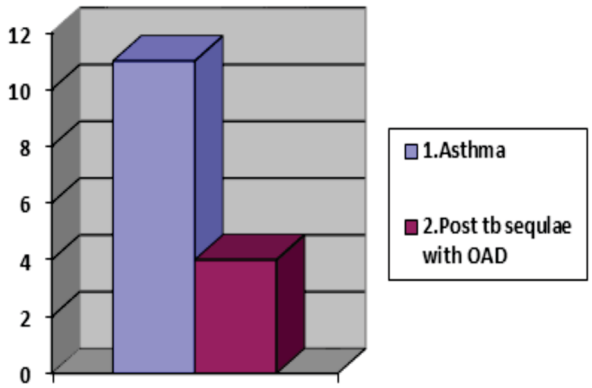
Treatment Protocol

All the patients confirmed for ABPA were started on tab itraconazole 200 mg bd for 4 weeks along with tab prednisolone initially
0.5 mg/kg for 4 weeksthen
0.25 mg/kg for 4 weeks then
0.125 mg/kg for 4 weeks then
tapered by 5 mg every 2 weeks for 4 weeks

RESULTS

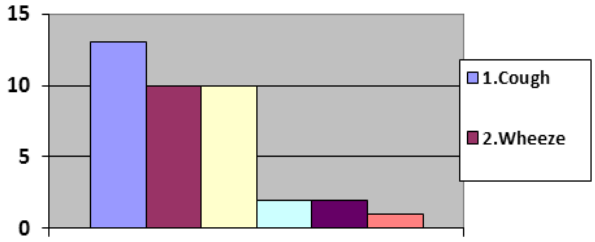
Mean age of the patients was 33.5 years with female n= 9.
Past history

1.Asthma	11
2.Post TB sequlae with OAD	4



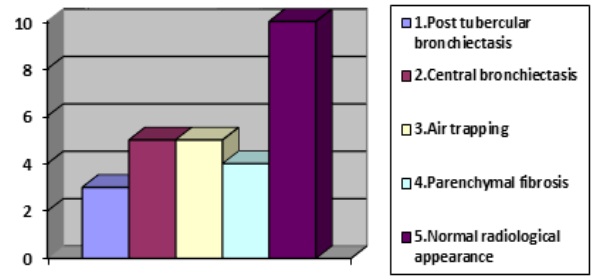
Symptoms

1.Cough	13
2.Wheeze	10
3.Shortness of breath	10
4.weight loss	2
5.loss of appetite	2
6.hemoptysis	1



Radiological Findings

1.Post tubercular bronchiectasis	3
2.Central bronchiectasis	5
3.Air trapping	5
4.Parenchymal fibrosis	4
5.Normal radiological appearance	10



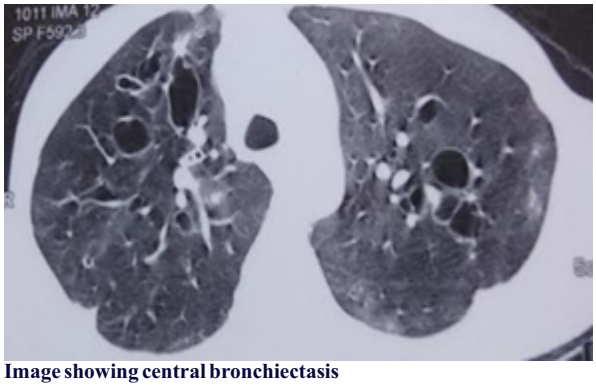


Image showing central bronchiectasis

Serum IgE, absolute eosinophils level and aspergillus specific IgE and IgG

Serum IgE 1000-1500	8
>1500	7
Absolute eosinophils level >500	10
Aspergillus specific IgE (+)	15
Aspergillus specific IgG (+)	2

OUTCOMES
Outcome was measured after 4 weeks of treatment with combination therapy
1. Based on symptom improvement

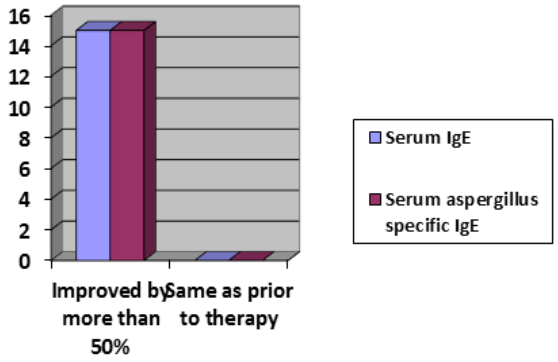
	Improved	Same as prior to therapy	Worsened
1.cough*	14	1	

2.shortness of breath	12	2	
3.wheeze	14	1	
4.weight loss	1	1	

*Cough severity in terms of frequency and intensity

2. Improvement in serum Ige and aspergillus specific IgE

	Improved by more than 50%	**Same as prior to therapy**
Serum IgE	15	0
Serum aspergillus specific IgE	15	0



DISCUSSION

In our study asthma was the most common predisposing factor. Cough was the most common symptom. followed by wheeze and shortness of breath. Patients were followed after 4 weeks of combination therapy and there was significant both clinically and in serological values. There were mild adverse effects like gastrointestinal upset and mild facial edema which was treated symptomatically without stopping of drugs. Because use of only steroids reduces the airway inflammation but does not eradicate fungal spores from the airway so combination therapy is more beneficial in management of ABPA

CONCLUSION

We suggest using combination therapy of oral itraconazole 200 mg bd and oral steroids in management of ABPA.

LIMITATIONS

Major limitation of the study was limited sample size.

REFERENCES

1. Agarwal R, Sehgal IS, Dhooria S, Muthu V, Prasad KT, Bal A, Aggarwal AN, Chakrabarti A. Allergic bronchopulmonary aspergillosis. Indian J Med Res. 2020 Jun;151(6):529-549. doi: 10.4103/ijmr.IJMR_1187_19. PMID: 32719226; PMCID: PMC7602921.