

Dekofcyn for Cough in Infants and Children

V. S. Joshi, M.D.,D.C.H.. Z. Prof. of Paediatrics, and Mrs. Jyothi Akofkar,
MBBS, Dept. of Paediatrics Sassoon General Hospital, Pune 411 001.

INTRODUCTION

Infection of the respiratory tract is very common in the children. Cough is the commonest symptoms of most of the respiratory affections and invariably a distressing one and needs immediate attention irrespective of the underlying cause. An ideal cough remedy in children

1. Should be nontoxic
2. Should have no side effects
3. Should have no cumulative or habit forming properties
4. It should not sedate, cause drowsiness or constipation.

Above all it should be palatable. If it has tonic properties also, it would be an additional advantage. The drug market is flooded with innumerable cough preparations. We have selected one indigenous preparation prepared by Alarsin and subjected it to trial to find out its efficacy on above points.

SELECTION ON THE DRUG

Dekofcyn, an ayurvedic preparation is described as a safe drug and that it can be used in infants, children and old age. As it is not an antibiotic, there is no fear of growth of secondary organisms. It is said that Dekofcyn does not hinder expectoration, does not depress respiration, does not cause sedation or constipation. It is said to act as a tonic also and give a sense of well being. It is said to have haemostatic properties and so useful in hemoptysis. It is also claimed that relief is generally obtained in one week's treatment with Dekofcyn.

MATERIALS AND METHODS

Dekofcyn was used in 50 children who had cough as a troublesome symptom. In those cases associated with specific respiratory infections appropriate antibiotics were given to control infection. In those cases of cough associated with tuberculosis, anti-tubercular drugs were given.

The minimum period of Dekofcyn treatment was for one week and in those cases where there was complete relief within 7 days, maintenance treatment was continued for one more week. Dekofcyn was continued for the second week in those who had partial or no relief during the first week. Those who had complete relief in 2 weeks were not given further treatment. In those cases where there was partial or no relief even after 2 weeks treatment was continued for the third week and final assessment of the results was made at the end of three weeks of treatment.

Among 50 children treated for cough, our investigation showed that 8 children had pulmonary tuberculosis, 3 had cervical lymphadenopathy, 2 had chronic bronchitis, 2 had bronchiectasis and 2 had asthma. In 8 children there was fever and cough due to acute respiratory infection. In 8 children cough was present as post measles episode. No particular cause was associated with the cough of rest of the children(17). The details are give in Table No 1.

TABLE I
Showing the associated cause for cough

Cause	No of cases	%
Pulmonary T.B	8	16%
Cervical Lymphadenopathy	3	6%
Chronic bronchitis	2	4%
Bronchiectasis	2	4%
Asthma	2	4%
Acute Resp Infection	8	16%
Post-measles cough	8	16%
No associated cause	17	34%
Total	50	100%

TABLE 2
Showing the Age group and sex

Age Group	Male	Female	Total	%
0-11 Month	3	3	6	12%
1-2 years	6	5	11	22%
3-4 years	3	9	12	24%
5-6 years	6	3	9	18%
7-8 years	2	3	5	10%
9-10 years	1	3	4	8%
11-12 years	2	1	3	6%
Total	23	27	50	100%

TABLE 3
Showing the nature of cough in male and female children

Nature of Cough	Male	Female	Total	%
Non productive cough	14	15	29	58%
Cough expectoration	9	12	21	42%
Total	23	27	50	100%

AGE GROUPS

The maximum number of children (12) belonged to the age group 3-4 years. The details are shown in Table no 2.

NATURE OF COUGH (Non productive cough & cough with expectoration)

29 children had non-productive cough and 21 children had cough with expectoration (wet cough). The details are given in Table No 3.

DURATION OF COUGH

The majority of children (17) had cough for the duration of 1 – 3 months. 4 children had chronic cough extending for 1-2 years. The details are given in Table No 4.

TABLE NO 4
Showing the duration of the cough

Duration	No of Cases
1-4 weeks	12
1-3 months	27
4-6 months	6
7-12 months	1
1-2 years	4
Total	50

NATURE OF EXPECTORATION

21 children had cough with expectoration. Among them 8 children had mucoid white expectoration 9 had frothy white expectoration, and yellowish green expectoration. The quality of expectoration varied from 1 ml to 15 ml. Only 1 child had haemoptysis. The details are in shown in Table No 5.

TABLE NO 5
Showing the nature of expectoration

Expectoration	No of Cases
Mucoid White	8
Frothy White	9
Yellowish green	3
Haemoptysis	1
Total	21

DOSAGE SCHEME OF DEKOFcYN

Children under 1 year were given Dekofcyn 1/2 tab. in a day Children 1/2 years were given 1/2tab two times a day. Children aged 2/5 years given 1 tab. two times a day. Children aged over 5 years were given 1 tab two or three times a day depending upon the severity of cough. Parents were advised to crush the tablet and to give it with honey.

Appropriate antibiotic was given in cases of acute respiratory infections. Cases of pulmonary tuberculosis were given anti tubercular drugs. Maximum period of Dekofcyn therapy was three weeks. Criteria for the assessment of results were as follows:

1. Complete Relief - Above 75%
2. Good Relief - 50-75%
3. Moderate Relief - 25-50%
4. No Relief - 25%

RESULTS OF DEKOFcYN TREATMENT NON PRODUCTIVE COUGH

Among 50 children under clinical trial with Dekofcyn, 29 children had non-productive cough. 14 among them had complete relief from cough in one week, 4 children in two weeks and 3 children in three weeks of Dekofcyn treatment. That is, 21 children (72.4%) had complete relief from non-productive cough within the trial period of three weeks, of remaining 8 children 3 Children had good relief that is, had only occasional cough, 5 children had moderate Relief and there was No Relief in 1 Child. The details are given in Table No. 6.

RESULT : COUGH WITH EXPECTORATION

21 Children had cough with expectoration. Out of these 13 children (62%) had complete relief in a maximum period of three weeks of treatment with Dekofcyn. 4 children had Good Relief, that is, had only occasional cough, and 4 children had Moderate Relief. that is, all the cases of wet cough had complete or partial Relief within the trial period of three weeks. There was 1 case of Haemoptysis.

Haemoptysis stopped in a week's treatment with Dekofcyn. The details are shown in Table No 7.

TABLE NO 6
Showing Results : Non – Productive cough

Relief	1 st week	2 nd week	3 rd week	Total	%
Complete Relief	14	4	3	21	72.40%
Good Relief (Occasional cough)	-	-	3	3	10.03%
Moderate Relief	-	-	4	1	13.80%
Slight/ No Relief	-	-	1	1	3.50%
Total	14	4	11	29	100%

TABLE NO 7
SHOWING RESULTS : COUGH WITH EXPECTORATION

Relief	1 st week	2 nd week	3 rd week	Total	%
Complete Relief	2	8	3	13	62%
Good Relief (Occasional cough)	-	-	4	4	19%
Moderate Relief	-	-	4	4	19.00%
Slight/ No Relief	-	-	-	-	
Total	2	8	11	21	100%

RESULTS : WEIGHT GAIN/LOSS

The weights of all the 50 children were taken before the commencement of Dekofcyn treatment and it was repeated after the trial period of three weeks. 42 children showed weight gain varying from 0.8 to 0.20 kg. In 3 children there was no change in weight. The increase in the weight of 42 children out of 50 is noteworthy. This may be attributed to the tonic effects of Dekofcyn. The details are shown in Table No 8.

OVERALL RESULTS OF DEKOFHCYN TREATMENT

Out of the 50 children, who had either productive or non-productive cough, treated with Dekofcyn for a maximum period of 3 weeks. 68% had complete Relief, 14% had Good Relief (Occasional cough), 16% had moderate relief and 2% had slight or no relief. Of the whole 82% had satisfactory relief from cough. 84% of children showed weight gain varying from 0.8 to 1 kg in three weeks. There was haemoptysis in 1 case and it stopped in a week's treatment with Dekofcyn. The difference in aetiological factors, as cough due to pulmonary tuberculosis, bronchitis etc did not materially affect the response of the drug thus showing that Dekofcyn acts primarily on cough. The details of overall response to Dekofcyn trial are given in Table No 9.

Table No 8
Showing Results : Weight Gain/ Loss

Weight	No.	%
Weight gain (0.8 to 1 kg)	42	84%
Weight Loss (0.2 to 0.3 kg)	5	10%
No Change	3	6%
Total	50	100%

Table No 9
Showing overall Results of Dekofcyn Treatment

Relief	Non Productive Cough	Cough with expectoration	Total	%
Complete Relief	21	13	34	68%
Good Relief (Occasional cough)	3	4	7	14%
Moderate Relief	4	4	8	16%
Slight/ No Relief	1	-	1	2%
Total	29	21	50	100%

Toxic or Side effects

No toxic or side effects were observed With Dekofcyn treatment though it was used in children as young as 3 months. This shows that this is a safe drug.

CONCLUSION

We conclude that Dekofcyn nearly confirms to the criteria of an ideal cough remedy for children.

SUMMARY

50 children, varying in age from 3 months to 12 years having productive and non-productive cough were given clinical trials with Dekofcyn at OPD , Paediatric Dept of Sassoon Hospitals, Pune. These 50 cases included some cases having cough due to pulmonary tuberculosis, Chronic Bronchitis and Bronchial Asthma. Some children had cough due to acute respiratory infection and some had cough as post measles episode. Overall assessment of results has shown that 82% of children had satisfactory relief from cough. The difference in causative factors did not appreciably affect the response to Dekofcyn, showing that Dekofcyn is a good cough remedy. No toxic or side effects were observed though all the patients were children showing that Dekofcyn is a safe drug.

ACKNOWLEDGEMENTS

We are grateful to the Dean, Sasson General Hospital, Pune, for allowing us to conduct this trial in the Paediatric Dept

for information on ALARSIN products
please write to: ALARSIN Marketing Pvt. Ltd.

Alarsin House, A/32, Road No. 3, M.I.D.C., Andheri (E), Bombay-400 093.