Trial of Abana in Cardiovascular Disorders

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ABSTRACT
The herbomineral compound Abana was tried in 50 cases of cardiovascular diseases of varied aetiology.

The present trial was a follow-up study for 10 weeks. Initially in all cases Abana was administered, 1 tablet t.i.d. for five weeks and then twice a day for the next 5 weeks.

There were 22 cases of myocardial infarction, 10 of post-myocardial infarction angina, 5 of angina with hypertension and one of stable angina, 6 of tachyarrhythmias of different aetiology, 4 of coronary insufficiency and 2 of hypertension.

The results were "Good" in 54%, "Fair" in 42% and "Poor" in 4% of cases.

Abana is a valuable addition to cardiovascular therapy as an adjuvant in the management of cardiovascular disorders.

INTRODUCTION
Coronary artery disease has been recognised for over two centuries. Cardiovascular diseases account for almost one quarter of all deaths in the world and almost one half of deaths in developed countries; and roughly one half of deaths are due to ischaemic heart disease in the cardiovascular disease group in developed countries. The emotional stress of competitive life, a sedentary life style, over-eating of unnatural foodstuffs and urbanisation of rural areas have contributed much to the occurrence of cardiovascular diseases.

Recently several remedies have been introduced for various cardiovascular ailments. The first report on the use of amyl nitrate in coronary artery disease was by Brunton in 1867. Since then many other anti-anginal agents have flooded the market and various combinations and permutations have been tried. But research scientists have been in search of a remedy, which would be economical, could be administered orally, have sustained action, and be free from side effects. With all these in mind a herbo-mineral preparation Abana (The Himalaya Drug Co.) has been introduced on the market. It contains such well-known herbal ingredients like Ashwagandha, Arjuna, Dashamoola, etc.

MATERIAL AND METHODS
A clinical trial of Abana was carried out in 50 cases, of which 40 were males and 10 females. The patients were mostly aged between 31 to 70 years (Table 1).

<table>
<thead>
<tr>
<th>Age in years</th>
<th>Male</th>
<th>Female</th>
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<tbody>
<tr>
<td>31-40 years</td>
<td>7</td>
<td>–</td>
</tr>
<tr>
<td>41-50 years</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>51-60 years</td>
<td>13</td>
<td>3</td>
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<tr>
<td>61-70 years</td>
<td>9</td>
<td>3</td>
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<tr>
<td>71 and above</td>
<td>2</td>
<td>0</td>
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Almost all these patients had a history of heart disease. Both clinically and on investigations, they were proved to have coronary artery disease or other cardiovascular disorders.
All the 50 cases were selected from those who did not show satisfactory response to conventional therapy or in whom coronary disease was detected for the first time.

There were 22 cases of myocardial infarction, 10 of post-myocardial infarction, six of angina with or without hypertension, four of coronary insufficiency, two of hypertension and six cases of tachyarrhythmias (Table 2).

<table>
<thead>
<tr>
<th>Table 2: Showing the response pattern</th>
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<tbody>
<tr>
<td>Type of disorder</td>
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<tr>
<td>Myocardial infarction</td>
</tr>
<tr>
<td>Tachyarrhythmias, i.e. L.G.L., P.A.T. etc.</td>
</tr>
<tr>
<td>Angina:</td>
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<tr>
<td>i. Post-myocardial infarction angina</td>
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<tr>
<td>ii. Angina with hypertension</td>
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<tr>
<td>iii. Angina without hypertension</td>
</tr>
<tr>
<td>Coronary insufficiency</td>
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<tr>
<td>Hypertension</td>
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The conventional therapy consisted of dipyridamole, 100 mg, initially 1 tablet b.i.d., isosorbide dinitrate 10 mg, ½ tablet t.i.d. and a calcium channel blocker, verapamil, 40 mg, 1 tablet q.i.d. When necessary frusemide (Lasix) tablet, 40 mg, O.D. and diazepam tablet, 5 mg b.i.d. were given.

To start with isosorbide dinitrate 10 mg, ½ tablet t.i.d. and dipyridamole 100 mg, 1 tablet b.i.d. and verapamil 40 mg, 1 tablet q.i.d. were given in all cases of cardiac infarction, angina of all the three types and coronary insufficiency. Isosorbide dinitrate was reduced to ½ tablet b.i.d. in the second week and was completely withdrawn in the third week. After three weeks or so the conventional drugs were gradually tapered off.

In cases of paroxysmal auricular tachycardia, L.G.L. syndrome and hypertension, verapamil and diazepam were given. In addition Lasix was used in two cases of hypertension. All were tapered off after three weeks.

Abana was administered in doses of one tablet t.i.d. for 5 weeks along with the conventional therapy described earlier. By five weeks the conventional therapy was tapered off and Abana, 2 tablets b.i.d., was given for a further period of five weeks.

Subjective and objective assessments were made before the initiation of therapy and after a period of ten weeks, Abana tablets being given in all the ten weeks. The objective assessment was made on clinical examination by the pulse rate, blood pressure findings and the presence of abnormal rhythm, and on other investigations such as SGOT and electrocardiogram findings. The symptoms were mainly substernal pain and/or heaviness, shortness of breath, palpitations and exhaustion. The improvement and satisfactory response were considered by the relief of symptoms and favourable clinical signs of improvement on the various parameters. The pulse rates and blood pressure readings settled in cases with tachyarrhythmias and tachycardia.

The patient's response was graded as "Good", "Fair" or "Poor" as under:

**Good:** Patients showed subjective and objective improvement, as well as ECG response, with reduction in dosages of conventional drug therapy.

**Fair:** Patients showed subjective improvement, and minimum objective improvement, with reduction in dosages of conventional drug therapy.
Poor: Patients showed no subjective or objective improvement, with mild side effects of the drug under trial.

Abana is relatively free from side effects. Only in one case erythema nodosum was observed, possibly due to the anti-coagulant the patient was already taking. Another complained of nausea and feeling of "ghabharat".

DISCUSSION
Abana, a new herbo-mineral compound, was tried in 50 cases of different cardiovascular disorders. Both subjective and objective improvements were observed in almost all the cases, within a week of therapy. To start with the drug was administered with conventional drugs and later on after five weeks or so the conventional drugs were tapered off.

Some ingredients of Abana need special mention. They are *T. arjuna*, *N. jatamansi*, *A. calamus*, *O. bracteatum* and *C. asiatica*.

Experimental and human studies have shown that Abana has a positive inotropic effect on the heart, improves exercise tolerance, reduces platelet aggregation, reduces sensitivity of the heart to adrenergic stimulators, and also possesses antiarrhythmic and hypotensive effects.

Out of our 50 patients, 22 were of myocardial infarction. Ten cases showed a good response and another 10 a fair response. This response can possibly be attributed to the reduced myocardial oxygen consumption and antiplatelet aggregation action exerted by one or more ingredients of Abana. Only in 2 cases, the drug had to be discontinued due to side effects.

A good response was observed in cases of tachyarrhythmias. Six cases were studied out of which 3 were of paroxysmal atrial tachycardia and 2 of Lown Ganong Levine (LGL) Syndrome. One case was of sinus tachycardia. Five cases out of the six showed good responses and one a fair response. This response can be attributed to the anxiolytic effect of Abana and the reduced sensitivity of the heart to adrenergic stimulants.

Sixteen of the 50 cases were of stable angina. Ten cases out of these 16 were of post-myocardial infarction angina. Five showed good response and 5 fair response, probably due to the reduced myocardial oxygen consumption, anxiolytic effect and reduced platelet aggregation property.

One case of angina pectoris without hypertension showed good response. The remaining five were of angina with hypertension. Of these, three showed good response and two fair responses, probably due to the hypotensive effect of the drug and reduction in myocardial oxygen consumption.

In cases of coronary insufficiency, 3 cases out of four showed a dramatic improvement with good response and the fourth a fair response. The beneficial effect could be attributed to reduced sensitivity of the heart to adrenergic stimulus and reduced myocardial oxygen consumption.

In 2 cases of moderate hypertension (110-120 mm Hg diastolic) both showed fair response, which could be attributed to the hypotensive effect of one or more of its ingredients.

The beneficial effects of the drug which were observed in various cardiovascular disorders can possibly be due to the combined and/or single effects of ingredients, viz., positive inotropic action, mild hypotensive effect, anxiolytic effect, reduced platelet aggregation property and reduced myocardial oxygen consumption.
Lastly Abana, a herbomineral compound, is safe, effective and practically free from serious side effects. The drug can be safely administered with beta-blockers, calcium channel blockers and nitrate compounds.

ACKNOWLEDGEMENT
We are thankful to The Himalaya Drug Co., for the liberal supply of Abana for our clinical trial.

REFERENCES