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Subject: Tobacco Smoking

Granville F. Knight, M.D., F.A.C.A.

237 West Pueblo Street, Santa Barbara

To the Editors: R. B. Scott has broached a touchy and important subject.

Thirty-three years ago I smoked my first cigarette - a Salome filched from the dresser drawer of my mother. She would have been horrified if she had known. Bad enough for a teen-ager to smoke, but much worse for her son to know that the President of the Contemporary Club should even dream of such a vice! How times have changed!

Smoking is a ridiculous and messy habit. Nevertheless, its appeal is attested to by constantly increasing numbers of devotees. Advertising is attuned to one age. Theoretically, the fact that in most individuals, smoking produces Tachycardia and a vasospasm and the absorption of considerable amounts of tar and other chemicals should be enough reason for every physician to advise his patients against the use of the drug. In addition evidence is accumulating to incriminate smoking as an important factor in pulmonary carcinoma. Nevertheless the fact that many physicians and their patients enjoy smoking and are unwilling to give it up, except in the face of dire necessity, renders such a general approach ineffectual.

How then is one to give practical and effective advice? Obviously, unpleasant or really harmful results from smoking must be demonstrated. Fortunately this is not difficult. Clinical hypersensitivity exists, and discovery of this state affords a basis for judgment. Many observers have investigated the effects of smoking -- and of nicotine -- on the cardiovascular system of normal subjects. The recent monograph by Roth is excellent. Nicotine seems to be responsible for the phenomena described. Whereas individual variations have been noted, few clinical studies have been reported.

The allergic approach is helpful, but not by means of skin tests. These have shown little correlation with clinical findings. However, Coca's observations that hypersensitivity to foods, drugs and inhalants may be demonstrated by a specific tachycardia provides a useful tool.

In private practice, the cardiovascular response to a smoking test coupled with a twenty-four hour pulse chart affords a satisfactory basis for determination of tobacco allergy or hypersensitivity. Correlation of the reaction to this test with symptoms has been revealing. (4,5)

After observing pulse and blood pressure responses to the first morning cigarette I have found that under test conditions 80% of smokers react positively. By this is meant a rise in pulse rate of six beats or more at the end of five minutes and usually a corresponding increase in blood pressure. The greatest pulse acceleration noted in 130 patients was 46; the average 18. The maximum increase in systolic blood pressure was 40 mm.; in diastolic 30 mm. The mean rise in systolic equaled 13.5 mm.; in diastolic 10 mm.

Negative reactors showed no change or a slight drop in pulse and blood pressure readings. For practical purposes controlled conditions were not attempted and were not necessary. While individual responses varied in amplitude from day to day, there was no change in the basic reaction.

The following symptoms and signs were ~~believed~~ <sup>observed</sup> in one or more positive reactors after smoking was stopped or markedly reduced:- severe fatigue, tachycardia, extra-systoles, palpitation, hypertension, headache, tension, forgetfulness, fearfulness, mental confusion, depression, post-nasal drip, nasal and sinus congestion, facial pains, pharyngitis, morning cough, hoarseness, chronic bronchitis (with coarse moist rales), paroxysmal tachycardia, spasm and aching of interscapular muscles, constipation and others. Therefore smokers with any of these complaints are entitled to a smoking test.

If symptoms are due to smoking, relief may be expected within 48 hours and a recurrence of discomfort will accompany the resumption of tobacco. Lack of improvement together with a continued tachycardia as shown by a pulse chart makes alcohol, foods, house dust or other allergies suspect.

G. F. Knight, M.D.

Positive smokers relieved of their symptoms by temporary avoidance of tobacco, should be strongly advised to quit completely and for good. Most of these will still react in spite of the use of so-called denicotinized cigarettes and special filters. Moderation usually fails.

Whether or not confirmed smokers give up the habit depends upon many factors. At any rate both physician and patient appreciate a logical basis for advice.

235 West Pueblo St.

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