COLORADO CLIMATE.

A Valuable Article for the Guidance of Physicians.

Read By a Well-Known Specialist in Lung Diseases

Before the Boston Society for Medical Observation.

The Class of Invalids Benefited by Mountain Climate.

The following paper was read by Dr. Frederick L. Knight, well-known as a specialist in lung diseases before the Boston Society of Medical Observation on March 1st. The physician here who has read it, pronounces it the best article on the climate of Colorado and on the class of invalids who should come here, that appears in any medical journal.

I have been asked to give the profession some practical hints on the choice of a climate for tuberculous patients. I am induced to comply with this request, although there is still a great diversity of opinion among those conversant with the subject, because there seems to be so little attempt even at any guidance of patients in this important matter.

I shall make no endeavor to review the constituents of climate, or to philosophize on their mode of action. I shall briefly present typical cases of pulmonary tuberculosis of different kinds, and point out how I should determine whether the patient should be sent away from home at all. And if sent, to what region of our own country.

WEEKLY GAZETTE: COLORADO SPRINGS, COLO., SATURDAY, MAY 12, 1888

CITY COUNCIL

Regular Meeting of the City Council, Monday Evening.

Important Report Presented from Sewerage Committee.

The Committee Empowered to Proceed with the Work.

Other Important Business Considered and Acted Upon.

A regular meeting of the council was Monday evening with W. D. Silliker, James H. McPherson, Frank E. B. Silliker, John H. Silliker, and W. D. Silliker present.

A petition from residents and property owners of the City asking that a water pipe be extended from the Fourth Street well was referred to the committee on water mains.

A petition for the use of the pond by the State Medical Society for their annual meeting, was on motion referred to the committee on public grounds and streets with power to act.

Aldererman Skinner, from the council committee, reported that the city street lamp is to be replaced at any time, the Colorado Gas & Coke company to cease supply to the city gas and light. The company in its letter states that the street lamp should be shut off except those in Alamo and Almo Squares and the sidewalk in the business part of the city. Alderman Skinner, from the council committee, reported that the city street lamp is to be replaced at any time, the Colorado Gas & Coke company to cease supply to the city gas and light. The company in its letter states that the street lamp should be shut off except those in Alamo and Almo Squares and the sidewalk in the business part of the city.
convenant with the subject, because there seems to be so little attempt even at any guidance of patients in this important matter.

I shall make no endeavor to review the contingent of climate, or to philosophize on their mode of action. I shall lay down the usual of pulmonary tuberculosis of different kinds, and point out how I should determine whether the patient should be sent away from home at all, and if sent, to what region of our own country.

I wish it to be distinctly understood that I am giving simply my own convictions on this important subject, based upon twenty years experience, and that I do not claim that the principles which guide me are by any means universally accepted by the climatologists. If I designate any special places for residence, it is only to avoid the accommodations and are well known, but it will be understood that there are scores of similarly situated regions which would answer just as well as far as climatic conditions are concerned.

1. Patients threatened with, or already having pulmonary tuberculosis, be advised to change climate?

This is a serious question, not to be acted offhand, and one cannot calmly look out of the window without being answered, that is usually acceded it. Not only is it a serious inconvenience and great expense often unnecessarily caused a patient and his family by hasty advice in this regard, but his condition is more infrequently made worse by it. This may happen in cases where it is better to remain at home than to change, or in which the destination has been improperly specified, or perhaps not specified at all. In every case the condition of the individual case must be carefully considered, whether any climate change could possibly improve it, and if so, what kind of a change would be most likely to effect it.

Other considerations, however, besides the disease of the patient, have an important bearing upon the question of change. Can the patient afford it? The physician should satisfy himself on this point; if possible, before mentioning it, and if not, should be reasonable, and often times more sacrifice than should be, is made to carry out ill-considered advice of the physician.

In reckoning the expense of change it must be considered: (1) Whether it is to be temporary or permanent; (2) whether the patient can lead an idle life, or must engage at once in some remunerative occupation, or, having remained idle for a certain time, there would be a good prospect of the patient's improvement.

In answering the first question it must be borne in mind that, as a rule, if an arrest of the disease is sought, a climate should be selected if possible in which the patient can remain throughout the year; if palliation only is sought, then a mild climate might be chosen in winter, which would be utterly unbearable in the summer.

It is not always wise to tell the patient that the disease is incurable, because there seems to be so little attempt even at any guidance of patients in this important matter.

(2) Patients in an acute condition.

(3) Patients recovering from acute pleurisy or pneumonia, in whom the absorption of tubercle is delayed.

(4) Patients in whom the tubercular process has seriously invaded the brain.

(5) Those with complications of other diseases, such as heart, renal, bladder, and tuberculosis.

The first object to be secured is an outdoor life in a pure air. This unhealthily is a benefit local effect, but the chief good comes through the general improvement in nutrition produced by an open air life, and this is much increased by the ability of the patient to exercise, and reaches its maximum benefit when he can lead an active, outdoor life at considerable elevations (600 to 8,000 feet above sea level).

It will be seen as we go over the different classes of cases with reference to their individual indications that some of these are not suited to the severity of the mountainous and clouded regions than on the plains. There are probably several cases for this. (1) A properly selected place, the air is rarified, causing increased respiratory exercises. (2) The air is very dry and very pure. (3) The number of hours when the invalid can take his exercise is vastly in excess of those on the plains.

Certain modifying influences which pertain to the individual, have always to be borne in mind. It can be easily understood that a more rigorous climate, one involving the necessity of more active exercise can be recommended to men than to women. The difficulty of securing sufficient, outdoor life for women, even in a mild climate, constitutes one of the chief factors in the relatively small prognosis in tuberculosis. Patients with much bronchial irritability often do but poorly in a very high altitude than in a lower one, and the same is sometimes true of a decidedly neurotic temperament. Age also must be considered in reference to possible removal to high altitudes. A very high elevation should not be a rule recommended to a patient over fifty years of age.

Whenever the patient goes he should if possible consult some good physician of the region, who will lay for him the proper course of treatment. The physician must always be ready to take advantage of any chance of recovery by neglecting to consult a legal authority for this purpose.

We will now consider the indications furnished by the types of the disease as before classified:

(1) Those presenting the earliest physical signs of chronic tuberculosis of the apex who have as yet shown little if any general disturbance from the disease generally.

(2) Patients whose condition is found to be less liable to hemoptyisis in high altitudes than on the plains. I do not remember any patient of this class in whom the tendency of recent years increased the removal to a high altitude, and although such a patient is usually advised to make several stops on his journey upward, I doubt if this precaution is often necessary. Of course it will be understood in this connection that no physician will of any advice to a patient who is not well known and cannot be given such advice.

(3) Patients in an acute condition. These may be quite different in their natural requirements. We find (a) cases of acute cancer or inflammation. These patients should be kept at home. (b) Cases which begin violently with high fever and marked consolidation of lung, resembling pneumonia. These patients should remain at home till the acute symptoms and then may be removed to some low, dry place; afterward increasing elevations may be carefully tried. (c) Cases of acute exacerbation during the progress of chronic disease. Patients of this class should remain at home at the acute stage of the disease, going perhaps, to some mild, sedative climate during its decline; but as soon as possible after the febrile disturbance is overcome, they must leave home and take a quiet, dry, restful climate.

(4) Cases of advanced disease, those with cavities or severe hectic symptoms. Patients of this class had better as a rule stay at home, certainly if they are sick enough to be confined to the house. They can usually be made much more comfortable at home than in any hotel, and yet have sometimes advised that such a patient with very constant and harassing cough be sent to the mountains. Florida and the effect of the sun has more influence for the want of some home comforts. A poor patient or one without alimony means even should not be given such advice.

(5) Patients in an acute condition. These may be quite different in their natural requirements. We find (a) cases of acute cancer or inflammation. These patients should be kept at home. (b) Cases which begin violently with high fever and marked consolidation of lung, resembling pneumonia. These patients should remain at home till the acute symptoms and then may be removed to some low, dry place; afterward increasing elevations may be carefully tried. (c) Cases of acute exacerbation during the progress of chronic disease. Patients of this class should remain at home at the acute stage of the disease, going perhaps, to some mild, sedative climate during its decline; but as soon as possible after the febrile disturbance is overcome, they must leave home and take a quiet, dry, restful climate.

(6) Cases of so-called Shrdi or interstitial pneumonia. Special indications in these cases have to be considered. If the patient is young, and the heart is not enlarged, he may be sent to high elevations. If he is over 50 years of age, or if his heart is dilated, or if his cough is very harassing, a lower altitude should be chosen. Southern California offers excellent places for such with varying elevations and moisture to suit individual symptoms.

(7) Patients recovering from acute pleurisy or pneumonia, in whom the absorption of tubercle is delayed. High elevations if the place per se excellent for the increased respiratory exercises and consequent increased nutritive value are exactly what is wanted to prevent the development of chronic disease.

(8) Patients in whom the tuberculosis is weak and for whom there is no marked febrility reaction, or much physical evidence of disease. This class seems particularly suited to altitude as treatment. Contrary to the old idea, these patients appear to be less liable to hemoptysis in high altitudes than on the plains. I do not remember any patient of this class in whom the tendency of recent years increased the removal to a high altitude, and although such patients are usually advised to make several stops on their journey upward, I doubt if this precaution is often necessary. Of course it will be understood in this connection that no physician will of any advice to a patient who is not well known and cannot be given such advice. How would you feel if you were to be advised to change your climate for one in a high altitude? It would give you something to think about for a while.
The air is rarefied, causing increased respiratory activity. (2) The air is very dry and very pure. (3) The number of clear days when the invalid can enjoy outdoor life is vastly in excess of those on the plains.

Certain modifying influences which pertain to the individual, have always to be borne in mind. It can be easily understood that a more rigorous climate, one in which the necessity of more active exercise can be recommended to men than to women. The difficulty of securing sufficient outdoor life for women, even in a mild climate, constitutes one of the chief factors in the relatively bad prognosis in tuberculosis in women as compared with men. Patients with much bronchial irritable often do less well in a very high altitude than in a lower one, and the same is sometimes true of a decided nervous temperament. Age also must be considered in reference to possible removal to high altitudes. A very high elevation should not be recommended to a patient over fifty years of age.

Whenever the patient goes he should consult some good physician of the region, who will look for him a plan of health. Many patients make themselves sick and even destroy their chance of recovery by neglecting to consult a local authority for this purpose.

We will now consider the indications formulated by the types of the disease as before classified.

(1) Those presenting the earliest physical signs of chronic tuberculosis from the apex, who have as yet shown little if any general disturbance from the disease and who complain only of morning cough and expectoration.

It is this class of cases especially which shows the effect of improved living. The change from the old plan of enforced invalidism to an active outdoor life has brought about any marked differences in the stage of the disease. It is, perhaps, not save too much to say that the prognosis has been changed in regard to this class of cases from very bad to very good.

While I have had such patients to do well in different climates, some of them without leaving home, the results have averaged far better, in my experience, in those who have found mountain climate or in those who have pursued any other course. The region which I have found best for this kind of treatment is the eastern slope of the Rocky Mountains, in the states of Colorado and New Mexico, where the altitude ranges from 4000 to 8000 feet.

The question will naturally be asked whether the patient should go to a high elevation in cases of acute general irritation. These patients should be kept at home indefinitely. (4) Those which begin violently with high fever and marked consolidation of lung, resembling pneumonia. Patients of this class should remain at home till after the subsidence of the acute symptoms, and then may be removed to some low, dry place; afterward, increasing elevations may be necessary. (5) Patients in the progress of chronic disease. Patients of this class should remain at home during the acute stage, getting, perhaps, to some mild sedative climate during its decline; but as soon as possible after the febrile disturbance is well over, if their condition otherwise warrants it, they should go to an elevated region.

(6) Cases of so-called fibroid or interstitial pneumonia. Special indications in these cases have to be considered. If the patient is young, and the heart is not enlarged, he may be sent to a high altitude at any age, or if his heart is dilated, or if his cough is very harsh, a lower altitude should be chosen. Southern California offers excellent places for such with varying elevations and moisture to suit individual symptoms.

(7) Patients recovering from acute pleurisy or pneumonia, in whom the irritation of tubercle is feebly. High elevations are the place par excellence for these. The increased respiratory and consequent increased nutritive activity is exactly what is wanted to prevent the development of chronic disease.

(8) Patients in whom the tuberculous process has seriously invaded the larynx. Such patients should be recommended to mild, and even moist climates, and on no account be sent to high altitudes. Southern California answers the purpose well. The dry air of high altitudes, however much good it may do by stimulating general nutrition, usually proves so great a local irritant to the larynx that incessant cough ensues, or, if the disease is situated high in the larynx, the swelling and ulceration of the cranium are aggravated so that severe dysphagia and insufficient nourishment ensue.

(9) Those with complications of other diseases. In regard to these a good deal of care has to be exercised oftentimes. In case of cardiac affection it may be said that while marked dilatation should prevent a patient's being sent into a high altitude, it is not necessary to exclude every one from such who has a moderate murmur, or who even is known to have a valvular disease, with moderate hyperpnea, but such patients should be care-