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PETROLEUM

IN

PULMONARY AFFECTIONS.

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To which is added an Editorial from *The Pacific Medical Journal*, November, 1894.

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PETROLEUM IN PULMONARY AFFECTIONS.

WHILE cod liver oil possesses a wide range of usefulness, there are many cases to which it is not adapted. Many of our patients are found to possess idiosyncrasies which render this oil not only very repugnant, but intolerable to the stomach and imperfectly digested in the alimentary tract. It is in these cases in particular as well as in lung diseases in general that we have found petroleum to be not only acceptable to the patient, but decidedly curative in its effects.

The following are brief histories of cases of true phthisis which have received benefit from Angier's Petroleum Emulsion with hypophosphites of lime and soda.

CASE I. Mrs. F., æt. 47. Catarrhal phthisis, with breaking down of lung tissue in lower posterior lobe of right lung. Temperature

ranging from 100° to 102° . Cough continuous and exhausting. Anorexia, impaired digestion and tendency to diarrhoea. She had used nearly all the emulsions of cod liver oil without benefit. Ordered Angier's Petroleum Emulsion in Port wine three times daily at first, but afterward ordered an extra dose at bedtime. This has been used continuously for one month, and the condition of the patient at this time is greatly improved. The cough is less frequent during the day and disturbs her very little during the night. The temperature has not reached 101° for a week or more. Although there has been little variation in the physical signs, the patient is much more comfortable in every particular. The appetite has improved and the digestive functions are better performed.

CASE II. Mr. M., *æt.* 32. An advanced case of catarrhal phthisis, with cavity under right scapula. Hectic. Had distressing cough and very irritable stomach and bowels. Diarrhoea had persisted for some weeks and required the most constant use of opiates and astringents. On this account it had been impossible to admin-

ister any of the preparations of cod liver oil. He was put on Angier's Petroleum Emulsion and it was found that given in ordinary doses it caused no discomfort whatever, but that there was a marked diminution in the number of discharges.

CASE III. Mrs. G., æt. 24. Incipient phthisis developing as a sequel of salpingitis. Had hacking cough for two months, with afternoon temperature of 101° daily, occasional night sweats, considerable prostration and dyspnoea, with increase of cough on slight exertion. There was a localized area of catarrhal affection under the left scapula, as shown by the diminished respiratory sounds and other physical signs. She had occasional attacks of diarrhoea. She had received the ordinary treatment of the hypophosphites, creosote and cod liver oil without any apparent benefit, but under the use of Angier's Petroleum Emulsion given in brandy and water or Tokay wine four times daily, her cough gradually disappeared and there was an uninterrupted improvement in the other symptoms. She has gained ten pounds in weight.

has no physical evidence of disease and all the bodily functions seem to be properly performed. She may be called practically well.

Other cases of phthisis might be cited in which the action of this remedy was markedly apparent. In all, however, one point was established, namely, its beneficial action upon catarrhal conditions of the digestive tract, rendering it more generally acceptable than other emulsions in advanced cases of tubercular diseases.

Of no less value is this remedy in various other catarrhal affections of the respiratory tract. The following case in a young child illustrates its prompt and beneficial action upon chronic inflammatory conditions of the mucous membranes, which are of a non-tuberculous character.

CASE IV. Child three years old had chronic bronchitis and emphysema following attack of whooping cough. Condition generally bad. Emaciated. Persistent cough, with labored and asthmatic breathing, which interfered considerably with sleep. Circulation poor, no appetite. Physical examination showed rude respiration,

with prolonged expiratory murmur over the entire area of the lungs, with moist rales in the larger bronchi. In addition to the necessary hygienic treatment, the child received two-thirds of a teaspoonful of Angier's Petroleum Emulsion in milk and whiskey every three hours. This, after the syrup of iodide of iron, was the only remedy employed. An improvement was noticed first in the cough and afterwards in the general condition of the little patient. Nourishment was more readily taken and the child gained perceptibly both in weight and strength. The respiratory movement became less labored and with the alleviation of the cough there came ability to enjoy an almost normal amount of sleep. At the present time the physical condition of the child is excellent, there remaining only a slight cough, which is aggravated by sudden changes of temperature, and a slight emphysematous condition of the lungs which bids fair under proper conditions to improve still further. There is every reason for attributing the foregoing good results to the persistent use of Angier's Petroleum Emulsion, which was

used daily for three or four months. Many cases of acute and sub-acute bronchitis can be recalled in which the frequent and persistent use of Angier's Petroleum Emulsion has added greatly to the comfort of the patient and has, moreover, materially shortened the disease.

To summarize its merits, we may state that the advantages of Angier's Petroleum Emulsion are its palatability, its easy digestion, its prompt assimilation and its sedative effect upon mucous surfaces. It meets certain indications far better than any preparation of cod liver oil, and is indicated wherever cod liver oil has been heretofore prescribed.

PETROLEUM IN MEDICINE.

(Editorial in the *Pacific Medical Journal*, November, 1894.)

Petroleum (rock-oil or the earth-oil of the Germans) is an amorphous fat-like body of vegetable origin consisting of a mixture of hydrocarbons, chiefly of the marsh-gas series. It passes by insensible gradations from the volatile and ethereal naphthas on the one hand into the semi-fluid and semi-solid malthas on the other. The petroleum used for medicinal purposes is refined by distillation and otherwise purified. Its consistency depends upon the volatilization of the lighter portions. All the purified varieties are more or less colorless or translucent, odorless, and tasteless, and are free from acidity or alkalinity and do not undergo decomposition or become rancid. Of late years petroleum purified by a distinct process has been largely used for internal administration as it possesses soothing and healing properties, especially grateful to the bronchial and gastro-intestinal mucous mem-

branes. The use of crude petroleum for medicinal purposes dates back to the dawn of history: We find that Herodotus wrote of the petroleum springs of Zacynthus, and the fountains of Hit are frequently mentioned by the Arabian and Persian writers. Pliny and Dioscorides describe the oil of Agrigentum under the name of Sicilian oil, and petroleum springs in the Orient are frequently mentioned in the early records of China. In America, petroleum was first described by a Franciscan friar, M. d'Allion in 1629. In 1829, crude American petroleum was exported and sold in Europe under the name of "American Oil."

Medicinal Uses of Petroleum—As early as the beginning of the present century petroleum had already gained a considerable reputation in the treatment of consumption, but it remained for the close of the century to see a scientific Petroleum preparation in the form of an emulsion which can justly lay claims to therapeutic value.

A good many years ago, Mr. A. E. Angier, a practical chemist, while experimenting, found that petroleum possessed soothing and healing

properties when it came into contact with the gastro-intestinal mucous membrane. A teaspoonful was administered one hour after each meal, but as much of it was found in the stools, it was concluded that its action was more or less mechanical. Some years later a finely sub-divided emulsion was evolved with the effect that all was absorbed. Administered in two teaspoonful doses the emulsion is found to possess expectorant, diaphoretic, antiseptic and slightly laxative properties. It also acts as a stimulant to the mucous membranes in chronic pulmonary affections. It is soothing and antiseptic in gastro-intestinal irritation, and acts as a food—a tissue builder—in wasting diseases. The emulsion—and Angier's Petroleum Emulsion is referred to as being a typical and so far the only satisfactory emulsion in the market—contains, besides petroleum purified by their peculiar process, twelve (12) grains of the hypophosphites of sodium and calcium to each ounce. It is easily borne by the stomach, it is tasteless and odorless, does not produce eructation nor indigestion, and is readily absorbed by the lac-

teals of the small intestines. A teaspoonful given three times daily after feeding to a full grown cat for three weeks increased its weight 340 grammes. The emulsion was thoroughly absorbed as shown by the dejecta. Two teaspoonfuls given three times daily to a large dog for fifteen days increased his weight 659 grammes. The emulsion was perfectly digested. A guinea pig was given half a teaspoonful of the emulsion three times daily for twenty days with the result that it gained 76 grammes. The usual amount of food being allowed these animals during the administration. These experiments prove conclusively that Angier's Petroleum Emulsion is a tissue builder. In phthisis the emulsion acts most admirably. It may be used in combination with

℞ Guaiacol, ℥j.

Ext. Pinus Canadensis, ℥ij.

Olei Eucalypti, ʒj.

Syrupi Papaveri, ʒj.

Emulsio Petrolei (Angier) q. s. ad ʒvj.

Misce et fiat Emulsio secundum artem.

Signa.—Tablespoonful one hour after meals.

Under this treatment with good hygienic surroundings, proper food, warm temperature and the inhalation of creasote liberated by steam atomization into the air of the room which the patient occupies, it is surprising how many cases of undoubted tuberculosis with bacilli in the sputum, recover in the course of a few months. The patients soon stop coughing. The appetite improves and they gain in weight.

In many cases of chronic bronchitis and bronchorrhœa, this Emulsion of Petroleum is also of undoubted value. The following combination has been found to act well in these cases:

R Terpini, 3 ss.
 Olei Eucalypti, 3 j.
 Syrupi Codeæ,
 Syrupi Tolutani, aa $\bar{\text{v}}$ j.
 Emulsio Petrolei (Angier) q. s. ad $\bar{\text{v}}$ vj.

Misce et fiat Emulsio secundum artem.

Signa.—Tablespoonful one hour after each meal.

The cough and expectoration grow less and the appetite and strength improve.

For asthma and spasmodic cough great benefit has been derived from the emulsion in the following combination:

℞ Elixir Chlor. Comp. (McNutt) ʒ ss.
 Extracti Pinus Canadensis, gr. xij.
 Extracti Cannabis Indicæ, gr. iij.
 Emulsio Petrolei (Angier) q. s. ad ʒ vj.
 Misce et fiat Emulsio secundum artem.

Signa.—Tablespoonful one to three hours during an attack, and after meals subsequently for a month or two.

When prescribed alone the dose of Angier's Petroleum Emulsion is two teaspoonfuls. It may be given plain or in water, milk, wine or other vehicle.

On trial it will be observed that the latter prescription cuts the attack short and prevents a recurrence by its soothing effect on the bronchial mucous membrane.

In obstinate diarrhœa or constipation with fermentation the emulsion acts as an antiseptic, preventing the formation of gases; it is also a gentle laxative, besides being a food which builds up the tissues. In scrofula and marasmus

Angier's Petroleum Emulsion acts as a food which does not disturb digestion. It is an agreeable vehicle for the administration of iodide of manganese and iodide of iron in these cases.

A trial of Angier's Emulsion will satisfy any one that petroleum in a finely subdivided form acts admirably in pulmonary and wasting diseases, whether given alone or in combination with other remedies. It is worthy the full confidence of the profession.

[NOTE.—For the information of those physicians, to whom Angier's Petroleum Emulsion is not familiar, we will state that it is prepared by the Angier Chemical Company, of Boston, Mass. It is put up in six and twelve ounce bottles, retailing at 50cts. and \$1.00. The adult dose is two teaspoonfuls three or four times a day, in water, milk, wine or other vehicle.—ED.]

