

the process we find it to be divisible into three stages. First, the wave motion leaves the brain and ceasing to be nerve motion in the mouth and hollows of the throat, it then becomes sound motion. Second—the sound motion having made a tour in the air for a time strikes on the ear, when third—it again becomes nerve motion and as such re-enters the brain recognizably the same as that which had been sent forth a moment or two before. A human idea, an idea as it were found within the arcana of the mind becomes, first, physiological motion, next physical motion, and again physiological motion, and this without losing those characteristics by which it is mentally recognizable.

This beautiful natural experiment does not impress us as it ought to do, probably because it has been familiar to us from our childhood, but is it not beautiful, and is it not, when deeply pondered over, sufficient to compel the most of us to wonder and admire?

CARBOLIC ACID AS A FEBRIFUGE.

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MORE than a year since an article was published in the *Indian Medical Gazette*, attributing a high value to phenic acid administered internally in the treatment of fever. On account of that, and of some other articles on the same subject by my predecessor with this regiment which appeared in the *Madras Medical Journal*, I resolved to make a trial of the medicine. Abundant opportunity was afforded and utilised during the prevalence of intermittent fever in this corps in 1873.

Several other remedies were employed at the same time; and, for convenience of contrast, the results have been arranged in a tabular form.

The cases recorded were all of uncomplicated intermittent fever, and were chosen promiscuously, except those treated by quinine and quinidine; these were generally the more severe ones. The treatment was never varied by the administration of any remedies but those mentioned, except a purgative which was always given whenever required.

1st Series of Cases, January—April 1873.

Treatment.	Dose and mode of administration.	Number of cases treated.	Average No. of days in hospital.
Carbolic Acid...	℥ 5 (or more) thrice daily in aqueous solution ...	20	5.40
Nitric Acid and Quassia ...	℞ Acid Nitric dil. ... ℥ x. Inf. Quassia ... ℥ i	17	4.645
Quinidine Sulphate ...	Dose ℥ i, or more, thrice daily. Gr. 5, or more, thrice daily dissolved in water with dilute Sulphuric Acid ...	14	3.357

In the above cases it might be said that the dose of carbolic acid was too small; but the results are confirmed by the 2nd series of cases, in which larger doses were administered.

2nd Series of Cases, June—October 1873.

Treatment.	Dose and mode of administration.	Number of cases treated.	Average No. of days sick.
Carbolic Acid...	℥ 10 to 20 thrice daily in aqueous solution ...	150	6.43
Diaphoretic Mixture ...	℞ Antim. Tart. ... gr. ½. Potass Nitrat. ... gr. 5. Spt. æther. Nit. ... ℥ 15. Aque ... ℥ i m.	199	5.48
Quinine Sulphate ...	Dose ℥ i to ℥ ii, thrice daily. Usually gr. 10 a few hours before expected attack ...	16	4.12

Those trials prove at least that carbolic acid is much inferior to any of the other remedies employed. It is now my belief that this medicine is of *no value whatever in the treatment of intermittent fever*, and that the patients would have got well as soon with the usual aid of a purgative, rest, and a blanket. In some cases (not recorded) a few doses of quinine or of quinidine were sufficient for cure after the marked failure of carbolic acid. I am not in a position to speak positively with regard to the reputed diaphoretic action of carbolic acid, but I think it is very doubtful. Abundant diaphoresis certainly did occur in the patients who were taking it, but also occurred in the patients who were not. Irritability of stomach was a common accompaniment of the fever which prevailed in this corps during the past year; and, contrary to what might be expected, carbolic acid did not seem to alleviate it in any case. These observations are, I think, sufficient to establish that carbolic acid cannot be relied upon in the general treatment of ague, and that its value in any case is, to say the least, exceedingly problematical.

SECUNDERABAD, February 1874.

BENICASSA CERIFERA, A SPECIFIC FOR HÆMOPTYSIS.

By BABOO UD JY CHAND DUTT, *Civil Medical Officer, Noakhali.*

THIS plant belongs to the natural order Cucurbitaceæ. In English it is called Squash or vegetable marrow. Its Sanscrit name is Kushānda (कुशांड) Bengalee Kumra (কুমড়া) Hindee Petha (पेटा). The large fruit or gourd is a culinary vegetable, and is extensively cultivated all over India for this purpose. The pulp of the ripe fruit is a specific for hæmoptysis, for which it is much esteemed, and extensively used by native physicians. It would appear that the older Sanscrit writers were not acquainted with this property of the article. The Rajnirghanta, the oldest work on therapeutics, gives a long account of its virtues, but does not allude to its use in phthisis or hæmoptysis. Sushruta also does not mention it in his chapters on the treatment of hæmorrhages and phthisis, though the plant is alluded to elsewhere. The more recent compilations, such as Chakradatta-Sangraha, Sarangadhar, &c., give many preparations of the article and fully detail its uses. I will now give an account of two of its preparations in common use, and the virtues ascribed to them:—

I.—Kushānda Khanda, or Confection of Squash.—In preparing this medicine old ripe gourds (the older the better) are selected. Those not at least a year old are not approved. The fruits are longitudinally divided into two halves. The pulp is then scraped in thin flakes by an iron comb or scratcher. The watery juice that oozes out abundantly during this process is preserved, the seeds being rejected. The pulp is boiled in its water till softened. It is then tied up tightly in a cloth, and the juice or watery portion allowed to strain through. The softened pulp is dried in the sun, and the strained juice preserved for subsequent use. For preparing the confection, take 12½ chittacks of the prepared pulp, fry it in 4 chittacks of ghee or clarified butter, add the strained juice, and boil again till the whole is reduced to the consistence of honey. Then put in 12½ chittacks of refined sugar, and heat over a gentle fire till the whole assumes such consistence as to adhere to the ladle. Now remove from the fire and add the following aromatic substances finely powdered:—long pepper and ginger each ½ chittack, carraway seeds, cardamoms, cinnamon, *tejpat* (leaves of *Laurus cassia*), black-pepper and coriander, each ½ chittack. Stir briskly with a ladle till cool. Then add honey 2 chittacks, and preserve in a new clean earthen pot. The dose of this medicine is from one to two tolahs according to age and strength of patient. Chakradatta thus describes its uses:—It is useful in hæmoptysis, phthisis, marasmus, cough, asthma, giddiness, dyspepsia, thirst and fever