AN INAUGURAL DISSERTATION
ON
Cynanche Trachealis

SUBMITTED TO THE
PRESIDENT, BOARD OF TRUSTEES,
AND MEDICAL FACULTY
OF THE
UNIVERSITY OF NASHVILLE,
FOR THE DEGREE OF
Doctor of Medicine.

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OF
Smithville, Mississippi

1858

W. T. BERRY AND CO.
BOOKSELLERS AND STATIONERS, NASHVILLE.
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It will not be my purpose, in treating of this common but important disease, to describe with minuteness, all of its various symptoms, peculiarities, and complications, as Medical Authors, and which is their province to do. But simply to speak of some of the most important of these also, to select such remedies in its treatment as will in my judgement be best suited to the exigencies of the case.

There are two varieties of this disease (i.e.) Catarhal and Pseudo Membranous Tracheitis. Each of these will be described separately and in the order above mentioned.

The disease is one peculiar to Infancy and Childhood. Although there are
exceptions to this rule, as cases have been recorded in which cough has stopped aside to make a victim of persons of mature years. Even old age has not escaped its ravages but these cases should be regarded as deviations from a general rule. As instances are comparatively rare in middle aged and old persons. Croup is a disease of great importance to the Practitioners of medicine, as no one who pretends to practice the healing art but will have his medical skill tested in its treatment, and often, with all the skill and ability for human to possess he has has to sit impotently by and see the little patient suffer and die amid the wails of a benighted and heart broken Mother. who, perhaps but twenty four hours before, had dandled his little
treasure upon her face whilst its soggy smiles and sulkry chokes was sufficient evidence of long life. Occasional children, according to the observation of Dr. Sondie, most frequently, between the years of one and five. While some contend that it does occur earlier than the seventh month having some croup in very young children, there deny its existence prior to that time. I cannot see any good reason why very young children may not have croup if exposed to the same causes which usually brings on the malady in the child of two years old. If exposed to the same necessities of weather without a sufficiency of clothing, to render them warm and comfortable, or so to suffer to lie upon the cold damp.
ground. The probability is that they would be as liable to contract the disease as at any other age but such is not the case as they are usually kept warm and comfortable confined to the room and especially is not carried out in cold despicable weather. This I consider sufficient to show why it is that very young infants are less liable to the Malady than older children. As age advances the mucous membrane of the Larynx & Trachea seem to become less liable to inflammation consequently in persons of mature years it is but seldom seen. The duration of croup is generally from twenty four hours to four or five days although there may be exceptions to this rule. Having mentioned some of the peculiarities of the disease I shall now attempt
Its description with the treatment applicable. Catarhal Larynx is by far the most common of the two varieties. It differs also in being less formidable, occurring during during dentition. It is generally of an aggravated character as the powers of the system is much worn and exhausted by the excitement and debility that usually attends dentition. It may be defined to be an inflammation or high vessel irritation of the mucous membrane of the Larynx & Trachea combined with spasm of the small muscles of the Larynx giving rise to hoarseness, cough, dyspnoea &c. Which as the inflammation progresses or gives way increases or abates. Hoarseness, does not usually attend the common catarval diseases of Children, and
when first noticed should lead to the conclusion that the disease is in its incipient stage and should be of sufficient importance for the early exhibition of mild remedies, which, when early used with almost invariably drive back the malady. This symptom usually attends cough throughout its whole course becoming more or less marked as the disease advances to the fatal or convalescent state.

The cough is peculiar so much so that authors who have written upon the subject have appended the name Croup Cough, which is dog, sonorous, and sing-song, as though it came through a brassen trumpet. It has been compared to the barking of a small dog, or the crowing of a young cock. So peculiar is this variety of cough that parents, although accustomed...
to the incessant coughing around them from mononcatareth are often aroused suddenly by this peculiar singing coughing sound even while asleep. Dyspnoea is another very marked symptom. The patient assumes the best position for the permeation of air into the air passages. For this purpose he sits up in bed, sometimes supports himself upon his hands & knees, or lies on his back with the head somewhat extended. There is a peculiar expression of countenance manifesting great uneasiness, anxiety, a beseeching look, as if imploring some relief, with great distension of the nostrils. There is a whistling sound emitted at each inspiration which as the disease advances becomes more distressing and greatly.chokes, until there may be an entire closure of the air passages and the patient is
literally choked to death. Pain attended with tightness or soreness in the throat is another of the chief diagnostic signs of diphtheria. This symptom is usually manifested in the Incipient Stage, but becomes more apparent as the inflammation advances. The febrile symptoms vary according to the degree. Inflammation usually begins towards night, and during the early part of the night, the pulse becomes more accelerated, the skin hot and dry, which as daylight approaches to some extent may wear off, and the little sufferers may rest better for several hours. There are a few other signs such as a purplish or livid hue of the lips, tongue, and paleness of the face. These are seen more commonly in the advanced stages of the disease. The above symptoms are
generally modified according as the in
flammation has extended along the tract
of the mucous membrane of the Larynx
& Strachea. In this variety of croup
the Prognosis is generally favorable especially
if the proper remedies are early applied as a
vast majority of children recover. Whim com-
plicated with other diseases the Prognosis
would be doubtful. The Causes of the
disease are principally cold. Exposure
to a cold and damp atmosphere, the child
being permitted to sit in a current of air
after having been closely confined close
to a poorly ventilated room is very apt
to bring on the attack. The neck of
children being usually exposed and
the sudden closure of the sweat ducts has
a great tendency to develop the disease.
It has been remarked that low damp
Situations are more prolific of Croup than other localities. Having made these remarks with regard to the nature, symptoms, prognosis & causes of the disease I will now attempt to give the treatment of the variety called Latawal Croup. The first and most important remedy in the treatment are Emetics. These should be used until full and copious emesis is produced. They overcome the spasmatic condition of the muscles of the larynx through off much of the tough mucous which accumulates in the air passages equalizing the circulation and acting as excipients. Some of them by their defibrinizing influence upon the blood prevents the development of the adventitious tubular membrane which is so characteristic of the second variety of Croup.
Speecuanka for the legs aggravated form of cough for a child two years old may be given diffused in water in doses from four to six grains every twenty minutes until full vomiting is produced. If however the symptoms are more violent one-fourth of a grain Taster Emite should be given with the Speecuanka. As an auxiliary to this treatment the warm bath might be used as there is sometimes great difficulty in getting the specific effect of the medicine. The warm bath acts very much in assisting it to act. Some of the official preparations of these Remedies may answer very well in mild cases viz. Wine of Specie and Antemonical Wine in the dose of a fluid drachm. Compound Syrup of Squill enjoys a high reputation.
In doses of twenty or thirty drops repeated at short intervals until emesis is produced. It might be necessary to give a mild laxative to keep the bowels in a soluble condition for this purpose. I would select castor oil in the dose of one or two teaspoonsful. In ordinary cases the above treatment will generally relieve with proper attention to diet which should be light. The patient being kept comfortable. Should however the paroxysm return the emetic may be repeated. Bloodletting may be resorted to. This should be regulated according to the effects produced. Scrapes have been recommended to the throat but as hemorrhage from leeches bites is sometimes difficult to arrest in young children and may require compression I would prefer
I would prefer placing them on the upper portion of the sternum. After the inflammatory symptoms have been somewhat subdued, rubefacients, liniments, or in any violent cases a blister to the neck may be of great advantage but it would be only in such cases that I would resort to a blister as they make a deep and ugly sore which usually takes a long time to heal, to the great inconvenience of the patient. Tobacco in the form of fomentation or calaplasm is sometimes very beneficial in overcoming the spasmodic contraction of the muscles. It should be used with great caution as fatal prostration might be produced. I should not however resort to this remedy only in very violent cases and after having tried...
various other means. The patient should be kept gently under the nauseating effects of ipecac or the compound dihydri- up of squill, carefully avoiding the prostrating effects of this medicine. Should the symptoms continue persistent, calomel would be of great advantage given in small doses, one grain every two hours so as to bring the system entirely under its influence. Should it have a tendency to pass too freely by the bowels, a small portion of doper's powder would probably correct this effect. The antispasmodic effects of this medicine renders it a valuable remedy in Croup. It appears to be more applicable in cases that are protracted.its action would seem too slow to rely exclusively upon it yet.
I have known physicians who relied upon it almost entirely and would argue that large doses of this drug in the commencement of Croup was the best available means. Having mentioned such remedies as are used in the cure of this variety I will now speak of the second variety of the disease viz. Pseudo Membrane Croup. I shall not attempt to give all the symptoms observable in this form but simply those diagnostic signs which distinguish it from the Catarhal or Spasmodic variety of Croup. Fortunately, this form of Croup is comparatively rare in this country. However, cases are occasionally met with in ordinary practice and should be regarded as a very dangerous
disease. In the commencement of this form of Croup the symptoms are not so distressing as in the other. The Pseudo Membrane may form almost simultaneously with the inflammation. There is Hoarseness which becomes more marked as the disease advances until the voice becomes nearly or quite extinct. The cough is feeble and hollow. Always more or less fever in which there is but little remission. Patches of plastic exudation may be seen in the fauces. Portions of the membrane may be coughed up which is always diagnostic of this form of the disease. The loss of the voice is also very indicative so much so that Dr. Wood has been enabled to detect this case before there was much febrile excitement even while the patient was enabled
to go about the house. But as this symptom sometimes occurs in the Chatarebral variety of croup it should only have weight in connexion with other symptoms. The Prognosis of this variety of croup is always doubtful. Should there be some abatement of the symptoms the cough becoming looser or the child is able to throw off portions of the false membrane. It should be regarded as favorable to its recovery. But should the symptoms continue persistent the pulse becoming quicker the extremities colder clammy great difficulty of breathing and the probability is that that the inflammation and tubular membrane has extended into the Bronchies the Prognosis would be unfavorable. Having given some
of the diagnostic signs of this variety of group I will now mention a few of the remedial agents to be employed in its treatment. The first thing after having used some of the nostrums recommended in the inflammatory form would be first to secure the separation and evulsion of the false membrane lining the larynx & trachea. A few drops of the compound syrup of euphila given every two or three hours would promote expectoration and aid greatly in loosening the membrane. Consequently would be of great advantage in the treatment. Other medicines may also be used for this purpose viz., echinacea tincture or their official compounds. The expulsion of the membrane for the clearing out of the air passages for this purpose
Alumina sulphate of Zinc or Copper Spermaceti or if the system be not too much inflamed Mercuris Emetic may be used either of these may answer. They should be given in emetic doses. As the formation of a Pseudo Membrane does not depend entirely upon a high degree of inflammatory action but a peculiar condition of the Blood in which there is an excess of fibrine. It is better to strike at the foundation of the disease for this purpose a purgative dose of colocynth should be exhibited followed by small doses of the same until the system is brought under its influence or until its defibrinizing effect is produced. Employing small doses of Dover's Powder when the medicine is disposed to act too freely upon the bowels.
Having given the general treatment of this form of Croup, I will now mention some of the local applications which might be resorted to with great benefit. Such as cataplasms, rubefacients, linaments, & blister. The most active effects of these remedies have an effect in overcoming the inflammation of the mucous membrane of the throat, cupping between the shoulder or on the upper portion of the sternum is also a good remedy. Bloodletting if resorted to should be in the commencement of the disease. If however the slight symptoms should be very great a moderate bleeding might be of great service. It now remains for me to notice some of the anatomical characters of each variety of Croup. In the catarhal form there
is more or less redening of the mucous membrane sometimes donall patches of plastic matter may be seen but not sufficient to have caused the fatal result swelling of the soft mucus tissue may also be observed in the Pseudo variety there is always a membrane formed within the larynx & trachea tending frequently from the larynx down into the Bronchi the mucous membrane is usually colored. The lungs frequently present the appearance of lobular Pneumonia & often there is an Empysematous condition of the organ.