AN INAUGURAL DISSERTATION
ON
Cynanche Frachealis
SUBMITTED TO THE
PRESIDENT, BOARD OF TRUSTEES,
AND MEDICAL FACULTY
OF THE
UNIVERSITY OF NASHVILLE,
FOR THE DEGREE OF
Doctor of Medicine.
BY
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OF
Smithville, Mississippi
1858
W. T. BERRY AND CO.
BOOKSELLERS AND STATIONERS, NASHVILLE.
Cynanche Trachealis

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 (viz.) Catarhal and Pseudo Membranous. 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 & ability, for human to possess he has has to sit impotently by and see his little patient suffer and die amid the wails of a bereaved & heart broken mother. Who, perhaps but twenty-four hours before, had handled her little
treasure upon her face whilst its soggy
ous smiles and waddy chokes was
sufficient evidence of long life. Occa-
in children. according to the observa-
tion of Dr. Bondie most frequently, between
the years of one and five. While some
content that it does occur earlier
than the seventh month having ten
croup in very young children, they
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 ex-
posed to the same accostadure of weather
without a sufficiency of clothing, to
render them warm and comfortable
or be suffered 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 and Trachea seems to become less liable to inflammation consequently in persons of mature years. It is but six days. 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. Larynx may be defined to be an inflammation or high vascular irritation of the mucous membrane of the Larynx & Trachea combined with spasm of the small muscles of the Larynx giving rise to hoarseness, cough, Dysphonia etc. Which as the inflammation progresses or gives way increases or abates. Hoarseness, does not usually attend the common cataral diseases of Children, and
when first noticed should lead to the conclusion that the disease is in its incubant stage and should be of sufficient importance for the early exhibition of mild remedies, which, when early used, will 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 dry, sonorous, andening, as though it came through a brassed 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 monon. Cataract are often aroused suddenly by this peculiar singing or gagging 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 distention of the nostrils, there is a whistling sound emitted at each inspiration which as the disease advances becomes more distressing and grating to the ears. 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 of inflammation; usually higher 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 sufferer may rest better for several hours. There are a few other signs such as a purplish or livid hue of the lips, tongue, and pulse, state of the pulse, cold skin, paleness of the face. These are seen most commonly in the advanced stages of the disease. The above symptoms are
generally modified according as the infection has extended along the tract of the mucous membrane of the larynx & trachea. 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. When complicated 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, especially to a poorly ventilated room is very apt to bring on the attack. The neck of children being 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 cutaneous 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 spasmotonic condition of the muscles of the Sarynx, through off much of the tough mucous which accumulates in the air passages equalizing the circulation and acting as scouring. Some of them by their stimulating influence upon the blood prevents the development of the adventitious tubular membrane which is characteristic of the second variety of Croup.
Specacuanha for the less 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 Tartar Emetic should be given with the Specacuanha. 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 officinal preparations of these Remedies may answer very well in mild cases viz. Wine of Specac. x Antimonial Wine in the dose of a fluid drachm. Compound Syrup of Squirrel 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 tolerable condition for this purpose. I would select castor oil in the dose of one or two teaspoonfuls. 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. Satchets have been recommended to the throat but as hemorrhage from septic sites 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 very 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 calaplasion 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 nauseous effects of specia or the compound by or up of squill, carefully avoiding the nauseous effects of the medicine. Should the symptom continue persistent calomel would be of great advantage given in small dose in 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 Dover's powder would probably correct this effect. The antispasmodic effects of this medicine renders it a valuable remedy in cough. It appears to one more applicable in those 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 Membranous 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 Hoars
ness which becomes more marked as the
disease advances until the voice becomes
nearly or quite extinct. The cough is hu
ble and hollow. Always more or less
fever in which there is but little Rem
ission. Patches of Pustule exudation may
be seen in the faucets. 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 Inductive so much so that Dr.
Wood has been enabled to detect this
case before there was much Physical exci
dation even while the patient was enabled
to go about the house. But as this symptom sometimes occurs in the Chataukah variety of cough it should only have weight in connection with other symptoms. The prognosis of this variety of cough is always doubtful. Should there be some abatement of the symptoms the cough becoming loose or the child is able to throw off portion 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 deficiency of breathing and the probability is that that the inflammation and tubular membrane has extended into the Bronchic 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 irritant recommended in the biliary form would be first to secure the separation & expansion of the false membrane lining the larynx & trachea. A few drops of the compound syrup of ipecac 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, Feneactus or their officinal compounds. The expulsion of the membrane for the clearing out of the air passages for this purpose...
Alum sulphate of Tine or Copper Sulphate or if the system be not too much invaded, Tartar Emetic may be used. either of these may answer. They should be given in Emetic dose. 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 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 cataplasm, rubefacients, sinapisme, & blisters. The local effects of these remedies have an effect in overcoming the inflamed condition of the mucous membrane of the throat. Cupping between the shoulders 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 febrile symptoms should be of great & 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 reddening 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 sub mucous 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, and often there is an Emphysematous condition of the organ.