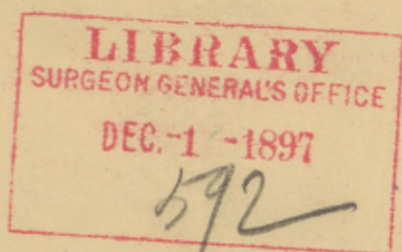


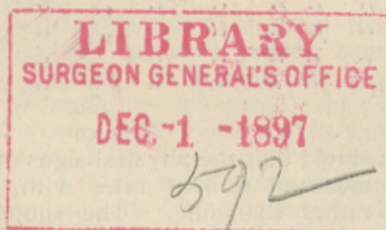
Fall (J. N.)

The physical signs
of acute bronchitis.



The Medical Fortnightly

THE PHYSICAL SIGNS OF ACUTE BRONCHITIS.



By J. N. HALL, M. D.,
DENVER.

The Physical Signs of Acute Bronchitis.

BY J. N. HALL, M. D.,

DENVER.

Professor of Therapeutics and Clinical Medicine in the University of Colorado.

Read at the Colorado State Medical Society, June, 1897.

I HAVE long been impressed with the idea that many students and young practitioners were misled by the statements in our works on medicine regarding the presence of the usual physical signs of acute bronchitis. Of a large number of prominent textbooks which I have consulted, but two emphasize the point that the signs commonly associated with this disease are more commonly absent than present. Beginning with the opening of the present year, I have recorded the exact signs found in each of one hundred successive cases, and present my conclusions for your consideration. No cases were included but those actually seeking and receiving treatment for the acute cough and expectoration, and particular care was used to exclude cases of pure tracheitis or other disease simulating the one in question. It should be stated that the record of each case was made at the time that it first presented for treatment. Doubtless some cases showed earlier or later than at the time of examination, more marked physical signs than are noted in this record, but my object was to learn in what proportion of cases, taken as they come to the physician, the classical signs of bronchitis may be found. No cases of broncho-pneumonia are included.

Of the cases seen, 49 were males, 48 females, 3 unrecorded.

In the first decade of life there were 31 cases.

"	"	second	"	"	"	"	"	7	"
"	"	third	"	"	"	"	"	27	"
"	"	fourth	"	"	"	"	"	15	"
"	"	fifth	"	"	"	"	"	16	"
"	"	sixth	"	"	"	"	"	2	"
"	"	seventh	"	"	"	"	"	2	"

100.

It is generally stated that the physical signs of acute bronchitis consist of wheezing, sonorous and sibilant rales with, frequently, moist rales, commonly coarse rather than fine. The subjoined table indicates the nature of the signs found in these cases:

The typical signs mentioned above were found in 35 cases.

Roughened respiratory murmur only was found in 9 cases.

Of the 35 cases first mentioned, moist rales were present in only 4 cases; wheezing, sonorous and sibilant rales only being found in the remaining 31 cases.

Moist rales only were found in 3 cases.

In the remaining 53 cases, no departure from normal respiration could be detected.

Although not strictly a physical sign, I studied the question of the presence or absence of sternal pain with the following results:

In 58 cases it was present.

In 18 cases it was absent.

In 15 cases its presence or absence could not be accurately determined, chiefly because of the youth of the patients.

In 4 cases pain was present in the left side; in 2 cases in the right side, and in 3 cases in both sides.

As a matter of fact, then, we find that most cases of the disease in question do not present the typical signs, but complain only of cough, expectoration and possibly sternal or other pain, leaving us to make a diagnosis without the assistance of physical signs, or, in part, leading us to a correct conclusion by their absence. In these cases, doubtless, there is a mild inflammation only, affecting the larger bronchi exclusively, and not accompanied with sufficient swelling of the mucous membrane to offer obstruction to the air-current, while the secretion is neither sufficiently abundant nor tenacious to produce abnormal sounds by obstruction of the tubes. It is evident that cases of this degree of severity are more abundant than are those in which the classical signs are found, and the fact should be definitely stated in the description of the disease.

It has been my impression that sonorous and sibilant rales were proportionately more common in children than in adults, but the figures are practically the same for those in the first decade of life as for others.

In my opinion, the pain in the chest in this disease should be divided into two distinct varieties. The form most frequently seen is that under the sternum, found in 58 of our cases. It is commonly a feeling of soreness or rawness rather than of acute pain, and is exaggerated by cough. It is seen, I believe, chiefly when we have a sharp inflammation of the larger bronchi, and is doubtless referable to this inflammation. It was found associated with the usually described signs of bronchitis in 22 cases, and in 8 of the 15 cases in which the presence or absence of sternal pain could not be determined, these signs were present.

The second variety of pain is that referable to strain of the diaphragm or other muscle or muscles, from the repeated sudden contractions or stretchings incident to the act of coughing. It is especially found in cases in which the cough is severe, as would be anticipated. In 4 cases it was located chiefly in the left side, in 2 cases in the right, and in 3 cases in both sides, commonly near the attachment of the diaphragm. Although but one such case is included in this series, I have noted many times previously, especially, as in this case, in women with lax abdominal walls, as after frequent child-bearing, pain in the abdomen upon coughing, evidently due to the concussion of its walls and contents by the spasmodic contractions incident to the process. The explanation seems the more probable since this variety of pain is easily relieved by firm support with a bandage, preventing free motion of the parts involved.

In one male, 26 years of age, who had suffered from asthma previously, the sonorous and sibilant rales were doubtless exaggerated by the asthmatic element. In another man of 35, who presented fairly marked

emphysema, coarse moist rales were abundant, as I have noted before in similar cases. It is probable that in many cases of bronchitis in which the rales are especially loud and sonorous, some latent asthmatic element is present.

In one case of bronchitis complicating mitral regurgitation, in one associated with mitral obstruction, and in one of serious disease of the pulmonic valves which I have recently reported,* very marked sonorous and sibilant rales were found. It is worthy of note that, in the only cases of valvular disease in the list presented, the signs of bronchitis, a disease well-known to be frequent in such cases, were especially well marked.

*Denver and Arapahoe Medical Society, March 23rd, 1897.

