

GRADE V (thirty-five minutes):

1. Feet closed, arms bent for thrust: Turn trunk left and thrust right arm forward—1. Return—2. Right—3, 4.
2. Arms bent for thrust: Straighten arms sideward, palms up, raise chest and inhale—1. Return—2.
3. Raise arms sideward and left leg forward—1. Move left leg backward and lower trunk one half forward—2. Return—3, 4.
4. Hands front of shoulders: Lower trunk one half forward and exhale—1. Raise trunk, raise arms sideward and inhale—2.

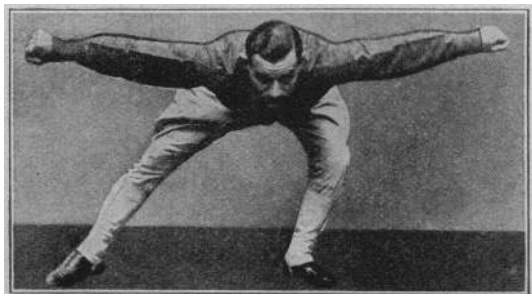


Fig. 23.—Grade VI, Exercise 4.

5. Arms bent for thrust: Lunge left and thrust sideward—1. Return—2. Right—3, 4.
6. Hands on hips: Turn trunk left—1. Bend trunk forward—2. Return—3, 4.
7. Run in place, twenty seconds. Breathing exercises. Repeat the run.
8. Raise arms forward and inhale. Lower sideward and exhale.

The free exercises cover about twenty minutes and should be taken in full time with brisk, snappy rhythm.

GRADE VI (sixty minutes):

1. Bend arms for thrust and place left foot backward—1. Lunge left sideward and thrust arms sideward—2. Return—3, 4.
2. Step left forward, raise arms sideward, raise chest and inhale—1. Return—2.
3. Raise left leg backward, hands front of shoulder—1. Lower trunk forward, arms sideward—2. Return—3, 4.
4. Lunge left sideward and bend arms for thrust—1. Thrust arms sideward and lower trunk forward—2. Return—3, 4.

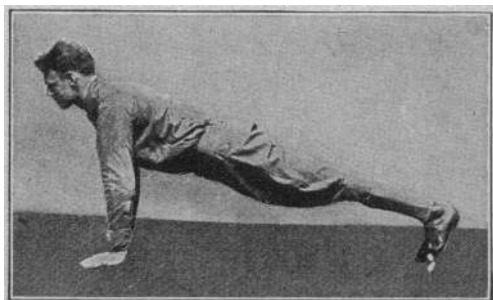


Fig. 24.—Grade VI, Exercise 5.

5. Bend knee and place hands on floor—1. Support lying frontways—2. Bend arms—3. Return—4, 5, 6.
6. Side stride stand, hands on hips: Bend trunk forward—1. Circle trunk left—2. Backward—3. Right—4. Forward—5. Raise trunk—6. Repeat, with circle trunk right.
7. Run in place, one minute.
8. Raise arms forward and inhale. Lower sidedownward and exhale.

Vigorous game, fifteen minutes. Games: Dodge ball, cage ball, volley ball, relay races, basket ball, tag games, etc.

Hike, twenty minutes. Part of hike in double time and rest in quick time. A swim may be substituted for part of hike.

The exercises are given each morning as outlined. Each afternoon, Grades I, II and III have fifteen minutes of exercises together, and Grades IV, V and VI have fifteen minutes exercises and fifteen minutes hike together.

ANTERIOR DISLOCATION OF ATLAS
FOLLOWING TONSILLECTOMY

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This case is so unusual, both as to the etiology and the failure to recognize the condition for a long period, that it is well worth reporting.

REPORT OF CASE

A private, white, aged 22, a farmer before entering the Army, with negative family and past history, was admitted to one of the base hospitals, Dec. 19, 1917, suffering from measles and acute follicular tonsillitis. Tonsillectomy was performed, Jan. 16, 1918; the night of the operation the patient's neck suddenly became stiff, and had remained that way ever since.

He arrived at General Hospital No. 6, in July, 1918, and the following brief history accompanied him: "1. Complaint: Pain in neck, stiffness of cervical muscles which permits of very little motion of the head, except anterior-posteriorly, which motion is limited. 2. Search for focal infection: (a) Tonsils (fragments); (b) roentgen ray, osteoarthritis, first and second cervical vertebrae; (c) teeth, abscess tooth; (d) Wassermann, negative; (e) genito-urinary, negative. 3. Treatment: (a) Tonsil fragments removed; (b) specimen from tonsil shows gram-negative diplococci; (c) tooth removed; (d) acetylsalicylic acid for pain, and sodium bicarbonate. Condition on dismissal: No improvement. Etiology: Probably of focal origin (tonsils)."

On arrival of the patient at this hospital, the general condition was good; the weight was normal; the neck was stiff, all motions being resisted in every direction; the soldier held his head in a rigid position with the chin depressed; he complained of pain in the cervical muscles on motion attempted in any direction; he could not rotate his head; he had persistent headaches. The general physical examination was negative except for exaggerated knee reflexes. The diagnosis was undetermined and the patient was sent to the roentgen laboratory for examination.

The roentgen findings were very positive. There was a simple, complete, anterior dislocation of the atlas and skull on the axis (epistropheus), unaccompanied by fracture. Stereoscopic plates showed the odontoid process (dens) free from any bony articulation and intact, the remaining part of the cervical spine being negative. The lateral masses of the atlas were no longer in contact with the superior articular processes of the axis. As the spinal cord must necessarily pass between the odontoid process of the axis and the anterior margin of the posterior arch of the atlas, it seems unreasonable to believe that it would be free from pressure in that small space in a complete anterior dislocation of the atlas, yet the patient had no symptoms of cord pressure. It appears quite evident that the transverse ligament of the atlas (the ligament that holds the odontoid process in contact with the anterior arch of the atlas) was ruptured, for it is hardly reasonable to suppose that the odontoid had slipped from under it. No evidence of osteoarthritis was seen in any of the cervical vertebrae. Following the roentgen examination, the nasopharynx was palpated, and the anterior part of the atlas was very easily felt as a large, rounded, bony mass pressing forward and occupying a large part of the cavity.

The soldier was placed under ether anesthesia and manipulation attempted. A gain from 5 to 100 degrees in rotation was noted, and flexion, extension and lateral bending were practically normal. Following the anesthetic the neck

appeared more stiff than before, roentgen reexamination showing no change in the position of the parts. The soldier declined further manipulations or operation. Suspension of the entire body from the head was of no avail.

COMMENT

There are some very interesting points regarding this case:

1. *History.*—It seems unreasonable to believe that we have the correct history of the case. The tonsillectomy was done under local anesthesia (procain), and this trouble came on suddenly the night of the operation. I have corresponded with the base hos-

any one would have simply palpated or examined the nasopharynx, the condition would have been diagnosed at once. The failure to recognize early such a marked pathologic condition on the roentgen plate seems unpardonable, yet the patient states he was rayed about six times. However, this is the second case of anterior dislocation of the atlas I have observed that has not been recognized on the roentgenogram.

PNEUMONIA AT CAMP FUNSTON

REPORT TO THE SURGEON-GENERAL *

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THOMAS M. RIVERS, M.D. (BALTIMORE)
First Lieutenants, M. C., U. S. Army

CAMP PIKE, LITTLE ROCK, ARK.

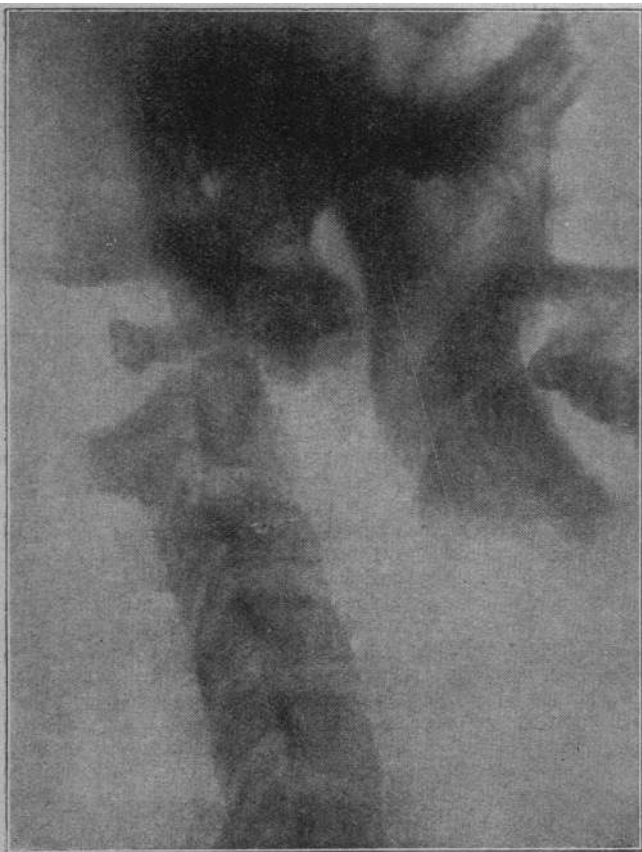
This investigation of pneumonia made at the base hospital at Fort Riley includes all cases of pneumonia that have occurred between July 23 and Aug. 31, 1918, at Camp Funston, including Detention Camp No. 1 for white troops and Detention Camp No. 2 for colored troops, in the 311th Cavalry stationed at Fort Riley, at the base hospital, and at the Medical Officers' Training Camp.

During the period of the investigation there has been no large outbreak of pneumonia at Camp Funston. The average number of cases has been two a day, the total number studied being 62. The number of troops in the camp has been approximately 42,000, so that for the month of August the pneumonia rate has not exceeded 1.5 per thousand.

Pneumonia has been of mild type; there have been only three deaths, and empyema has occurred in one instance. The clinical diagnosis has been lobar pneumonia in fifty-five cases and bronchopneumonia in seven cases. The pneumonia observed here has presented no unusual clinical characters, and in the three cases in which necropsy has been performed, there has been lax consolidation of one or more lobes of the lungs.

Pneumonia of this period has in considerable part affected newly drafted negro troops from Southern states, namely, Louisiana and Mississippi. This pneumonia of newly drafted troops has presented characters that deserve special consideration. During our study, cases of pneumonia from two drafts of colored troops have been fairly numerous. In the period from June 19 to 23, 5,982 drafted colored men reached Camp Funston, and were sent to Detention Camp No. 2, located 5 miles from Camp Funston. They were held in detention camp two or three weeks, until assigned to units stationed at Camp Funston. Among these drafted men, between June 15 and August 31, sixty-nine cases of pneumonia have occurred. Among 12,000 white men drafted in June there has been only one case of pneumonia.

* Because of lack of space, this article is abbreviated in THE JOURNAL by omission of Tables 3 and 13. The complete article will appear in the authors' reprints.



Simple anterior dislocation of the atlas.

pital from which the patient was sent. It is stated that there is no history of trauma, and the patient denies any himself.

ANATOMIC POINTS NOTED ON A TRUE LATERAL PLATE OF CERVICAL REGION, OBSERVED IN SIMPLE ANTERIOR DISLOCATION OF THE ATLAS

NORMAL	DISLOCATED ATLAS
1. Posterior pharyngeal wall practically vertical.	1. Posterior pharyngeal wall markedly curved forward, anterior to atlas.
2. Anterior margin of anterior tubercle of atlas in line with anterior margin of body of axis.	2. Anterior tubercle on a more anterior level.
3. Lateral masses of atlas rest on superior articular processes of axis.	3. Lateral masses of atlas on a more anterior level.
4. Odontoid process in contact with anterior arch of atlas.	4. Odontoid process free.
5. Anterior margin of posterior tubercle of atlas on a plane posterior to anterior margin of spinous process of axis.	5. Anterior margin of posterior tubercle on a plane anterior to anterior margin of spinous process of axis.

2. *Error in Diagnosis.*—It is somewhat difficult to believe that such a gross condition as this would pass with a diagnosis of osteoarthritis for six months. If