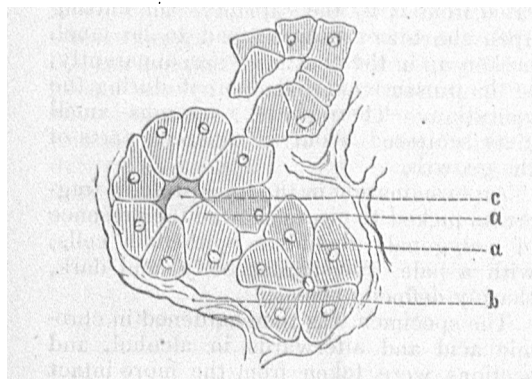


is at times alveolar. The capsule, which at points is quite thick, is infiltrated by cylindrical masses of these cells, which ramify in manner frequently observed in certain kinds of cancer. The neighboring parotid was much flattened and atrophied. There was a larger amount of adipose tissue in it than one would expect to find.

The tendency of the new growth to imitate the adjoining gland, both in the character and arrangement of its cells, is shown well at the point from which the accompanying drawing is taken. We find, however, at other points a departure from the normal gland type—indeed, appearances which suggest a more malignant form of disease than simple adenoma.

FIG. 2.



- a. New epithelial cells.
- b. Stroma, somewhat alveolar.
- c. Cavity of acinus.

That the disease was originally benign in character there can be little doubt, if we may judge by the clinical history. The sudden change in character—namely, its late rapid growth—seems to be explained by the microscopical appearances, which show a very decided modification of the gland type in the greater portion of the tumor.

Whether this change may be considered as a malignant or merely an inflammatory one, I think it is difficult to decide. It is very possible that we may have caught the disease at the period of transformation from a benign to a malignant character.

In its minute anatomy, this tumor differs totally from any tumor that I have examined, although to the naked eye it was not unlike certain soft enchondromas of this region. The majority of these tumors were either "mixed cartilaginous" or myxoma. One very malignant form of growth proved to be a sarcoma. I can find nowhere a minute description of a form of tumor similar to the one described.

Cornil and Ranvier, after speaking of adenoma of the breast, say:—"Other acinous glands can be the seat of analogous lesion, such as tumor of the parotid gland."

Rindfleisch, on the other hand, says:—"An adenoma of the salivary glands has never yet been described. He has seen a soft cancer of the parotid, which he considers a very rare form of growth. The description is, however, evidently that of a different kind of growth from the above. Billroth mentions cancer of the parotid, which is still a different growth, a variety which I hope to be able to refer to on some future occasion. Neither he nor Förster speak of adenoma of this organ.

There was nothing found, although a careful examination was made for the purpose, indicating a development of the newly formed epithelial cells from the parotid gland epithelium. The new growth was separated from the gland by a thick capsule, and nowhere could any communication between the new and the old cells be traced. It would seem probable that the new growth was developed from the connective tissue in the neighborhood of the parotid—a point of interest to those who believe in the development of epithelium from connective-tissue cells. Not less interesting is the resemblance of the new cells to the neighboring parotid epithelium, showing the influence which is exercised by normal epithelium over the form of epithelial cells originating in the neighborhood.

## PROBABLE DISLOCATION OF A DORSAL VERTEBRA. RECOVERY.

By J. W. GROSVENOR, M.D., Lockport, N. Y.

WM. M., a large, strong, healthy man, 22 years of age, a teamster by occupation, on September 19th, 1870, while sitting on a load of wood, drove under a beam. His body was caught between the beam and the wood and was doubled together in front so that his chest was forcibly bent upon his abdomen.

Half an hour after the accident his extremities were cold, and pulse rather feeble; pain in back very intense. He was slightly stupid, but answered questions correctly. He had free use of his arms, could draw up legs slightly towards his body with considerable difficulty. Examination of the back revealed a large swelling over the whole region of the dorsal vertebra. Firm pressure upon this swelling caused excessive pain.

Examination under chloroform disclosed

a dislocation of the spine in the dorsal region, probably dislocation posteriorly of the eighth dorsal vertebra. An attempt at reduction with the hands while the patient was under chloroform failed. Only a moderate amount of force was used. An application of equal parts of whiskey and water was made to the swelling upon the back and one-half grain doses of morphia, *pro re nata*, to relieve pain were ordered.

On the following day, the swelling had considerably subsided and legs could be moved with much more freedom. On the fourth day after the accident, patient had gained entire control of his lower extremities, but suffered considerable pain in them, especially in ankles. He was not able, however, to turn from side to side in bed without assistance. From the fourth to the eighth day patient was improving slowly in strength and appetite. On the ninth day, he could turn himself in bed without aid. Tenderness over the dislocation was slight, though considerable pain existed over all the lumbar region. Pulse was 84 and rather weak. Tongue was dry, glazed and red, without coating, an appearance it had exhibited since the second day after the injury.

Improvement continued to be gradual up to the nineteenth day, at which time patient became stupid, and mental aberration existed to some extent. Pupils appeared to be unnaturally enlarged; head quite hot; pulse 96 per minute. These last-mentioned symptoms continued two days, after which time progress towards recovery was steady and uninterrupted.

On the twenty-fifth day, patient was able to stand on his feet a few moments; on thirty-sixth day, could walk about his room a little; could not stand perfectly upright.

On May 2d, 1871, seven and one half months after the accident, I saw the patient and examined him. He was able to perform only light work at that time; carried a pail of water with some difficulty; assumed a slightly stooping posture when walking; very thin in flesh. The prominence on the back continued, apparently rising one inch and a half above the surface.

It is remarkable that a dislocation of the spine so complete should terminate in recovery. Seldom does such a severe dislocation of the spine occur without causing a larger amount of paralysis. In fact, it may almost be said that no paralysis whatever existed, for, half an hour after the accident, the patient had control over all his extremities; could move his legs in any direc-

tion, although very slowly and with great difficulty.

The treatment of this case and its termination in recovery show the appropriateness of the advice usually given in cases of dislocation of the spine, to observe a "masterly inactivity" and use no severe measures in attempting *reduction* unless the symptoms are urgent and threaten life.

The word *probable* is used at the head of this article because the diagnosis is a matter of some uncertainty, and will remain so until death permits an ocular examination. That either a dislocation or fracture or both occurred at the time of the accident is not a matter of doubt. A hard, bony tumor of the magnitude described suddenly appearing over the line of the spinal column, and caused by violence, points irresistibly to one or both of the results above mentioned. The nature of the accident favors the probability of a dislocation. The usual method of fracturing the spine is by the use of some powerful crushing force which acts directly upon the part fractured. In this case, the force was not applied directly to the injured part, but to the upper part of the spine.

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## Selected Papers.

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### THE THEORY OF DISINFECTANTS.\*

By T. P. BLUNT, M.A., F.C.S.

THE light which has recently been thrown upon the nature of contagion and infection by the labors of Pasteur and others, the results of which have been ably summarized by the President of the British Association in his late inaugural address at Liverpool, seems to point the way to clearer and more comprehensive views than those commonly entertained at present regarding the operation of the substances known as disinfectants.

These may be divided into two classes:—  
 1. Those which act by the oxidation and total destruction of the virus contained in infected matters, together with the foul gases which usually accompany it, and which are, in fact, nature's danger-signals of its presence. 2. Those substances which do not possess the active chemical properties of the first class, yet are proved by experience to have a similar power of arrest-

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\* Read before the Annual Meeting of the Shropshire Scientific Branch of the British Medical Association.