

in which cancer becomes necrosed and forms an ulcer on its base, which is of frequent occurrence. That was demonstrated a long time ago but no especial attention was paid to it. There is practically always more or less ulceration in cases of cancer, but that is an entirely different proposition from the development of cancer on a true ulcer of the stomach. The pathologists who first demonstrated cancer beginning on an ulcer of the stomach, state that it is to be found only very rarely, the proportion being about 1:20. Rosenheim, who was next to demonstrate cancer on an ulcer, found it only in 1:15-20 cases and I think most clinicians will agree with his findings. So that it is not necessary that we should treat ulcer of the stomach with the idea that all such ulcers will turn into cancer. The cases we would lose at operation would be greater in number than the cases we would lose otherwise later on from cancer. If the patient has ulcer of the stomach and does not do well under medical treatment, we may conclude it is a case for surgery. If the hemorrhages are so great that they endanger life we should operate, preferably during the interval. In cases in which pain persists under medical treatment, we should try surgery. The results of surgery are not altogether good in cases of persistent pain. We may occlude the pylorus, do a gastro-enterostomy and still the patient will have pain. But we should recommend surgery in persistent cases as affecting the most hope of relief.

DR. F. A. SPEIK, Los Angeles: If I heard correctly, Dr. Cheney made no division of the ulcers which should be treated surgically or those which cause mechanical obstruction. A recent article by Sippy in *THE JOURNAL* states that mechanical obstruction at the pylorus is due in some cases to pyloric spasm and inflammatory swelling, which disappears under energetic medical treatment, proper feeding and the use of alkalis. I too have taken cases with as much residue as a quart for eight hours, with sarcinae and high acidity. Under treatment they improve steadily. Possibly there may be some recurrences, but the majority do not recur. Although the narrowing may be quite complete, the opening seems to become wider and the food passes through. I had a recent case, a Jewish patient about 65 years of age, who had been to three surgeons. He had lost 17 pounds in weight, was vomiting old food with high acidity and could not retain sufficient food to nourish him. He was not satisfied to have an operation until he consulted three men. He then entered the California Hospital, but when they began to administer ether he jumped off the table, grabbed his clothes and dressed outside the hospital, so they could not catch him. He went to the county hospital, where I made a diagnosis of pyloric ulcer with inflammatory swelling. I then treated him. He has not vomited since, and has gained 50 pounds in weight. If he had been operated on he might have died. If he recovered it would have been a surgical cure. As you know, these gastro-enterostomies are not all done by the Mayos. The loss of life is almost as great from such operative procedures as it is from cancer of the stomach. What can we do to prevent this great loss of life and cancer of the stomach, and do away with the complications of ulcers that require surgery? We should recognize ulcer of the stomach early and treat it energetically. It is the early recognition of this disease that is most important. It is partly the fault of the layman, the press and the physician that these patients do not oftener receive early and proper medical treatment. The layman may think he has nervous dyspepsia or indigestion and not go to a physician. Or the advertisements in the press may induce the patient to take remedies that obtund the patient's sensibility and thus delay recognition of his true condition. If the patient does go early to the physician, he may not pay sufficient attention to the case, and prescribe without making an accurate diagnosis. We should educate the public to do away with so-called stomach cure advertisements and work harder to make an accurate diagnosis. Early, energetic medical treatment would reduce the cases requiring surgery and do away with the tremendous loss of life from cancer of the stomach. Heal the ulcer and prevent cancer!

DR. THOMAS McCRAE, Philadelphia: Two points might be emphasized. Dr. Cheney has discussed one reason for the difference in view; another is the difference in material. The material that goes to a surgical clinic—and they are getting more and more cases without previous study—is very different from the cases that come to a medical clinic. The same difference is true regarding hyperacidity. Some surgeons often say that hyperacidity always means ulcer. Many have learned after operating, that hyperacidity may be present without ulcer. Another point is the criticism made by many surgeons regarding the past history of patients with neoplasm. They say to us, "You do not take a careful history; if you had taken your history carefully, you would find a history of ulcer in the past." I must protest against this. Such a claim certainly is not true in the cases reported by Dr. Cheney, nor in the series mentioned by Dr. Einhorn.

DR. WILLIAM FITCH CHENEY, San Francisco: As has been brought out, all ulcer is not ulcer. What is ulcer is to be taken up in the next paper. But the patients who recover medically are not always ulcer patients. However, it is perfectly justifiable to treat the patient awhile medically to see if he will get well. Not all cures are cures. How are we going to tell when a man is cured? I have practiced long enough to find that many cases I have considered cured were not cured. They often come back a number of years later worse than when you first saw them. All surgery is not surgery. If the medical man makes a diagnosis of gastric ulcer, I would not for a minute contend that he should at once refer the case to a surgeon. He should try by medical means to cure the patient, for patients repeatedly get well following medical treatment. But if the patient does not recover or has a relapse, then he should have a surgical operation. When it comes to the surgical operation, it is just as much the duty of the medical man to provide a competent surgeon as it is to provide any form of treatment. He must assume the responsibility of what he advises his patient to do, and he should select the best possible surgeon. I make an earnest plea that we do not let our gastric ulcer cases go so long hereafter before we send them to the surgeon.

BIRDSHOT REMOVED FROM THE VITREOUS THROUGH THE PUPIL*

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SAN FRANCISCO

A. G., boy, aged 12 years, was brought to my office Feb. 12, 1907 (*Journal* No. 314). Two days previously, while quail hunting, a birdshot No. 9, fired from his companion's gun, at a distance of about 50 yards, had entered his left eye. The sight was immediately gone. The local physician gave him 10 c.c. streptococcus serum.

Right eye: Sight 5/4, fundus normal.

Left eye: One mm. up inward from center of cornea a triangular gray flap, lens cataractous, swollen; iris shows a tear in pupillary margin corresponding to the corneal wound. Fundus not visible. Pupil dilates irregularly with several posterior synechias after atropin. The roentgenogram shows a shot to be in the vitreous downward inward from the center.

In consultation, the opinion was divided between the removal of the eyeball and preserving it.

I decided to remove the cataract with the idea that I might then be able to see and remove the shot.

I find in my case book the following notes:

March 8, 1907: Projection of light only reliable horizontally outward. April 13, 1907: Eye nearly pale. Patient was sent home to the country. April 26, 1907: Pupil in upper part

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clear. With transilluminator; gray floating membranes seen in vitreous.

When the patient returned again, May 3, 1907, he gave the following history:

The day before while wrestling with a boy he fell on him and bumped his head against the other boy's. He immediately felt a sharp pain in the left eye, lasting several hours.

To my great astonishment the shot lay now in the lowest part of the anterior chamber, whence it was removed under a general anesthetic. Apparently the fall forward and the striking of the head had caused the shot to pass through the pupil into the anterior chamber. The eye quieted down rapidly.

May 8, 1907: Eye pale, upper part of the pupil clear, in lower part secondary cataract. With transilluminator: grayish folds in lower part of vitreous. Sees movement of hands.

April 7, 1915: Sees movement of hands. Field (with a white piece 3 cm.) small, only outward. The cornea shows up inward from center an irregular scar at the point of entrance of the shot. The pupil is slightly irregular, oval up outward, 4 by 6 mm., clear, surrounded by a ring of secondary cataract. The fundus cannot clearly be seen. Behind gray bands in the vitreous I can make out extensive whitish patches and probably folds of detached retina.

This accidental occurrence shows us a way for the therapy in such cases. I would suggest removing the cataract as soon as possible and then trying to bring the shot into the anterior chamber through the pupil by methodical stooping exercises and even judicious bumping of the forehead while lying flat on the stomach.

Butler Building.

ABSTRACT OF DISCUSSION

DR. JOHN A. DONOVAN, Butte, Mont.: The results in this case justify the practice of the immediate removal of the traumatic cataract when secondary symptoms are not marked. The next procedure, to await developments, taking time to study the case, not being sure of the proper course to pursue, was more than justified by the results. This case but emphasizes the absolute necessity of studying every case of eye injury singly. These injuries should suggest to us the necessity for some enterprising shotgun artist among us to supply us with a complete table on ballistics, especially as to penetration. You will notice No. 9 shot is unusually small, therefore, its penetration is but little compared with the average size of shot. Again, at 50 yards, the penetrating effect of this very small shot is much reduced. Its effect when dropping into the vitreous is proportionally lessened; so that in another case the size of shot, distance from gun, caliber and proportion of shot to powder will assist us in determining its effect. I just saw a patient treated by my associate, Dr. A. W. Morse, during my absence a year ago. A grain of No. 4 shot struck his eye from across a river, leaving a wound which separated the iris from its junction, the eye being filled with blood. The patient was put to bed to await developments. The Roentgen ray showed shot in the orbit, but unfortunately a defective outfit gave unsatisfactory results as to location. Some days later the patient rubbed the shot out from between his lids. At present the eye shows a red reflex between iris and sclera at the point of injury, a black line and an enlarged black spot just opposite this in the choroid; vision is good. Puzzle: Did the shot go through the eyeball and how did it come out? At first we thought not; now we believe it went through the eyeball and worked itself out. I have had several patients in whom shot was imbedded in the posterior orbital tissue and no harm has been done by leaving it. If in the eyeball and loose, I would attempt removal as early as possible. If imbedded in the posterior wall, I would watch developments.

DR. ADOLF BARKAN, San Francisco: The interesting case described by Dr. Pischel brings to mind cases of a similar

nature, in which treatment was not always so successful. I should like to mention briefly one which came to me in an earlier period when this most valuable remedy for locating foreign bodies in the eye was not at our disposal. It was a case of a young boy in the country whose eye was injured by his cousin while quail hunting. We were in doubt as to the existence of a shot in the eye. About the fourth week after the injury, sympathetic irritation of a very severe nature appeared in the other eye. We removed the injured eye. When I shook the enucleated eye I then enjoyed the most pleasurable tactile sensation that I ever experienced in my life, for I felt the shot moving within. The other eye recovered. The method suggested by Dr. Pischel is one which most of us may have occasion to apply. I recollect several cases of cataracts luxated into the vitreous, which we successfully removed from the eye by systematically bending the patient's head down after enlarging the pupil, bringing forward the cataracts into the anterior chamber and then extracting them.

DR. EDWARD JACKSON, Denver: With a shot so small as this, the doctor should be congratulated on getting it readily out of the anterior chamber. I remember one case in which the shot entered the anterior chamber but did not penetrate the iris. When the anterior chamber was opened the shot disappeared and we thought it had passed into the posterior chamber through the iris. Then it reappeared under manipulation. We have not generally realized the difficulty thus encountered, and that the angle of the anterior chamber is to be seen only with the ophthalmoscope. This particular shot, which I think was about the size of the one Dr. Pischel passed around, disappeared absolutely when we attempted to extract it from the anterior chamber. But in changing the patient's position so that the eye was face downward, the shot again presented itself and we got hold of it and it was extracted. Bird shot may be made of cast iron, and in Europe such a shot has been extracted by the use of the magnet. That should be borne in mind; but so far as I know such shot in this country is all made of lead.

DR. A. E. EWING, St. Louis: Dr. Pischel is to be congratulated that he was able to obtain this shot at all. I have had a similar experience in the last two years, the case differing in that the shot passed into the eye from above through the sclera and the vitreous and returned to the lower position of the anterior chamber. Its removal was accomplished by keeping the head forward and by pressing the sclera against the lens in the ciliary region below, thus preventing its return to the vitreous, which was threatened several times.

DR. JOSEPH L. MCCOOL, Portland, Ore.: I recall a case very similar to the one reported by Dr. Pischel which presented some unusual features. A young man while chopping wood was struck in the eye by a small chip of steel, which passed through the cornea, iris and lens. With both the ophthalmoscope and oblique illumination what resembled the foreign body was located apparently in the substance of the lens. Repeated applications of the Parker magnet through a corneal incision failed to dislodge the steel into the anterior chamber. After making another examination I assumed that the chip of steel had passed through the entire thickness of the lens and dropped down into the vitreous. The magnet was again applied in such a way as to draw the steel through the zonule and up from behind the iris through the pupil into the anterior chamber. It was delivered through the artificial incision in the cornea made twenty-four hours before. The unusual feature in this case was the appearance of the lens; what looked like a small, thin piece of steel embedded in the substance of the lens was in reality the edges of the wound which, due to the difference in refraction from the center of the wound and the surrounding lens substance, gave the impression of a foreign body.

DR. KASPAR PISCHEL, San Francisco: I would like to add that several shots were taken out of the face and that we tried magnetization of the shots but unfortunately they were not attracted by the magnet.