littling this source of irritation, I would also suggest that intra-ocular pressure has often quite as much to do with the production of such lesions as the actual introduction of irritants. Gerrish⁶ has well said, "that anything which arrests the current dams back the lymph upon the region which the vessel normally drains, unless the fluid can escape by some side channel, and this interference results usually in one or both of two principal changes. The first of these is dilatation of the vessels from the increased pressure of lymph within, and the other is saturation of the tissues on the distal side of the obstruction with lymph, and their consequent hyperplasia from over-nutrition." The deposition of lymph between the lamellæ of the cornea is a prerequisite for the production of an opacity in this structure, and it may well be that the same thing holds for an opacity in the lens.

Whether a cerebral hemorrhage really occurred in this case is not for me to say. The symptoms of a cerebral hemorrhage — at least some of them — were undoubtedly present. In both hysteria and exophthalmic goitre, however, the same symptoms may also occur. In the paralyzes of exophthalmic goitre, Joffroy places in the order of frequency, ophthalmoplegia first, then paralysis of the facial muscles, the jaw, tongue and velum palati. In hysterical hemiplegia, according to Sinkler,⁷ the face is never paralyzed. The patellar reflex, which is commonly diminished or absent in exophthalmic goitre, was increased in this case, and if anything, more so on the left than on the right side.

In hysteria the patellar reflex is increased in a large proportion of cases. Although hysteria and hemiplegia were both present in this case, the existence of the facial paralysis and that of the tongue and velum palati (for to nothing else can I attribute the peculiar thickness of speech), would seem to argue against the hysteria as the cause of the hemiplegia. The choice lies between a hemiplegia of exophthalmic goitre origin and a cerebral hemorrhage. The suspicious improvement in the movements of the facial muscles, tongue and speech after a two weeks' course of belladonna inclines the writer to the opinion that the cerebral hemorrhage, if it ever existed, must have been extremely small in amount. A series of fly blisters on the nape of the neck greatly relieved the symptoms of irritation at this point.

Clinical Department.

TWO EMERGENCY CASES AT THE MASSACHUSETTS GENERAL HOSPITAL.

BY CHARLES L. SCUDDER, M.D., BOSTON,
Surgeon to Out-patients at the Massachusetts General Hospital; Assistant in Clinical and Operative Surgery, Harvard Medical School.

CASE I. INJURY TO HIP AND ABDOMEN; SUBSEQUENT ACUTE STAPHYLOCOCCUS INFECTION; OSTEOMYELITIS OF ILEUM; OPERATION; DEATH; AUTOPSY.

M. S., five and one-half years old, had had no illness previous to a fall from a fence on a Thursday. The fall was not regarded at the time as serious. An abrasion of the abdomen on the left side and a con-

tusion of the left hip were the only evidences of injury. On Friday he seemed rather indisposed. On Saturday morning he was examined by Dr. Warren Gay, who found the left thigh flexed and the abdomen slightly distended. Tenderness and pain were present in the left groin just above Poupart's ligament. The bowels had moved naturally. There was no tenderness over either kidney. He had vomited once. The temperature was 99.5°; the pulse was 90. He could extend the leg without pain. Examination of the boy Saturday evening found less distention of the abdomen and greater resistance to extension of the thigh. Muscular spasm was very evident about the hip-joint. There was no muscular spasm Saturday morning. Monday morning the abdomen was distended. He was listless; he had vomited once. The leg was extended. The temperature was 100°; the pulse 120. The urine was high in color. He was sent to the hospital.

Monday evening the boy was seen at the hospital. He was found to be delirious at times. He answered questions fairly intelligently. He was restless. The urine was high in color, acid, 1.016. There was a slight trace of albumin. Sugar was absent. A few hyaline and fine granular casts and an occasional blood and renal cell were seen in the sediment — evidently a urine of renal irritation. The leucocytosis was 17,600.

Evidently the boy was suffering from an acute septic infection. The only localizing symptom was the abdominal pain and tenderness in the left side and the persistent flexion of the left thigh and leg, associated with muscular spasm of the left hip muscles.

A median abdominal incision revealed a swelling of the iliacus muscle at its origin from the inner surface of the ilium. This swelling fluctuated distinctly. The abdomen was too much distended and this swelling was too deep to have been detected without operation.

In order to avoid infecting the peritoneum, an extraperitoneal incision, as if for tying the iliac vessels, was made, and the fluctuating swelling was opened and its contents evacuated extraperitoneally. The inner surface of the ilium for a considerable extent was found bare of periosteum. About six ounces of a thick grumous pus was evacuated. The cavity of the abscess was thoroughly cleansed and drained, through the extraperitoneal opening, by gauze wicks.

Two days later the boy died. From the time of the operation till he died there was no material change in his condition. High temperature, delirium and failing pulse were the physical signs. The infection was intense. Six days from the injury the boy was dead.

Abstract from the autopsy records of the Pathological Laboratory of the Massachusetts General Hospital; autopsy by Dr. J. H. Wright, six hours post mortem:

Anatomical diagnosis. — Purulent infiltration and abscess formation in the tissues adjoining the left iliac bone; acute osteomyelitis of the left iliac bone, purulent arthritis of the left hip; incipient acute general peritonitis; hemorrhagic infarction and acute fibrinous pleuritis of the left lung.

Dissection of the parts adjacent to the wound in the left side of the trunk shows the following conditions: The cavity of the wound and abscess extends downward between the anterior surface of the iliac bone and the muscles in the fossa of the bone. Here the periosteum is separated and the periosteum is denuded,

⁶ *Treatise on Surgery*, Park, vol. i, p. 520.

⁷ *System of Practical Medicine*, Loomis, vol. iv, p. 699.

but is not necrotic. In their place there is an accumulation of thick, dirty yellow pus. There is some purulent infiltration of the tissues near the bone, just below the line of the pelvis. The gluteal and other muscles just posterior and external to the iliac bone are infiltrated with thick, dirty yellow pus, which exudes from the cut surfaces in abundance. The iliac bone on being broken open shows in places yellow pus in the interior of its spongy bone. The left hip-joint on being opened exudes a considerable quantity of thick, dirty, grayish-yellow purulent fluid. No definite lesion of the cartilages was made out. No disease of the spinal column was found. No disease was found in the portion of the sacrum adjacent to the left ilium.

Bacteriological examination. — Cover-glass examination of the pus of the left hip-joint shows pus and cocci. The pus cells are generally necrotic; cocci are numerous; cultures in blood serum, right lung, confluent growth of small colonies of a yellow color; staphylococcus pyogenes aureus. The exudate from the peritoneal cavity, liver, spleen, and the pus from the region of the left iliac bone, all show numerous colonies of staphylococcus pyogenes aureus.

REMARKS.

The sequence of a comparatively slight trauma and an acute infective process is extremely interesting. It was impossible to determine the exact origin of the primary infection. The osteomyelitis appeared to be secondary to the process elsewhere present — to have extended from other parts. Until the involvement of the hip-joint and the associated muscular spasm, it was impossible to locate accurately the lesions. The inclination to lie with the left thigh flexed was suggestive of a left-sided lesion seated within the psoas or iliacus muscle or within the hip-joint. In the absence of early muscular spasm, primary disease of the hip-joint could be ruled out, and some obscure lesion near the left psoas or left iliacus muscles was thought to exist. The muscular spasm which appeared later suggested that any difficulty in the hip was secondary. The autopsy demonstrated this to be true.

CASE II. EXTRA-UTERINE PREGNANCY; RUPTURE OF SAC; OPERATION; RECOVERY.

J. O., thirty-five years old, married ten months. Last catamenial period was eight weeks ago, lasting three days. Ordinarily catamenial period lasts four or five days; ten napkins a day. Some nausea and loss of appetite seven weeks ago. To-day when patient was first seen she told the following story: At eight o'clock this morning she was seized with sudden agonizing pain in the median line of the abdomen, above the pubes. She was working about the house at the time, but on reaching a sofa she fainted. On recovery from the initial faint the pain had become general in the abdomen and she was unable to sit up. The pain persisted in the abdomen, but extended upward away from its first seat to the epigastrium, the right shoulder and the right side of the chest. She had through the day a few fainting spells.

Upon entrance to the hospital her temperature was 99.8° F.; pulse 100 and of fair strength; respiration 42; leucocytosis 28,000. She presented an anxious expression of countenance, with pallor of lips and rapid respiration. The abdomen was slightly distended uniformly. A mass was felt in the hypogastric

region which was firm and slightly sensitive. The bladder was empty. In either groin there was tenderness to deep pressure. Dulness existed in each flank and suprapubically. Vaginal examination discovered the uterus pushed forward and crowded downward. The os was patent and slightly soft. In the left cul-de-sac was a fulness which was tender to the palpating finger. The history of a sudden onset of pain during pregnancy, associated with repeated fainting attacks, the pallor, the rapid respiration, the dulness in the flanks, suggested an extra-uterine pregnancy which had ruptured, partially filling the abdominal cavity with free blood.

Operation found a ruptured tubal pregnancy on the left side. The quantity of blood present in the abdomen was not measured. The tube was tied off, the abdomen sponged out with dry gauze sponges, and the abdominal wound closed with sutures of silkworm-gut.

During convalescence the temperature rose once to 100.5° and then slowly came to normal.

In the after care of this case no nourishment was given for twenty-four hours. During these first twenty-four hours sips of hot water were given to relieve thirst. There was a little abdominal distention during the first few days, which was relieved by the use of enemata of suds placed with the aid of a rubber catheter high in the colon. Broths were allowed on the second day; broth and milk on the third day; liquids and soft solids by the end of the week; house diet after the first week. The bowels were moved by enemata every other day. The patient left the hospital after seven weeks, wearing a snugly-fitting abdominal swathe. She will wear this swathe for about two months.

THE CLINICAL MANIFESTATION OF A PHYSIOLOGICAL FACT.¹

BY WILLIAM H. ROBEY, JR., M.D., BOSTON.

THIS brief paper is presented because the physiological fact mentioned does not seem to be generally appreciated, no clinician whom I have questioned being able to tell whether the sign was pathological or not. The matter came to my notice in the following manner: A man brought his four-year-old child to the out-patient clinic for examination. He said that the child was sitting on the kitchen table about seven o'clock the previous evening when he suddenly fell, having apparently lost his balance, struck his head on the floor and became unconscious; he vomited at the time and had been dull and stupid ever since. The father held in his arms a pale, limp, unconscious child. The history, as given by the parent, suggested some cerebral condition, and with that in mind we first examined the eyes, and found that the pupils were contracted to pinhole size, equal, and unaffected by light. Then the patellar reflexes were tried and proved to be normal, but in tapping the knee the child regained consciousness, sat up and looked around; the pupils instantly dilated to their normal size and we found, to our surprise, that a healthy, sleeping child had merely been awakened. The man had not made it clear to us that the child had eaten his breakfast and that he had brought him to the hos-

¹ Read before the Clinical Club, November 17, 1899.