

### SUMMARY

Parietal neuralgia must be considered in the differential diagnosis of dull persistent pain referred to any cutaneous area. It is particularly to be considered when the findings are not suggestive of some clean cut, deep seated pathologic process. It is in general an elimination diagnosis, only to be advanced after careful search for other possible causes. It may simulate a great variety of other conditions and is undoubtedly responsible for many tentative diagnoses of pleurisy, gallbladder disease, kidney disease, and spastic colon for which adequate evidence cannot be advanced. Relief depends upon the recognition and correction as far as possible of the basic pathologic processes. Of chief importance is its differentiation from conditions requiring operation.

### REFERENCES

1. McKenzie, J.: Contribution to the study of sensory symptoms associated with visceral disease. *Med. Chronicle, Manchester* 16, 1892.  
McKenzie, J.: *Symptoms and Their Interpretation*. (London: Shaw and Sons Ltd., 1909).
2. Head, H.: A disturbance of sensation with special reference to the pains of visceral disease. *Brain* 16:1, 1892.  
Head, H.: *Ibid* Part II Head and Neck. *Brain* 17:339.  
Head, H.: *Ibid* Part III Heart and Lungs. *Brain* 19:153.
3. Sherren, J.: On the occurrence and significance of cutaneous hyperalgesia in appendicitis. *Lancet* 2:816, 1903.
4. Carnett, J. B.: Intercostal neuralgia as a cause of abdominal pain and tenderness. *Surg., Gynec., and Obst.* 42:625 (May) 1926.

## TREATMENT OF ACTINOMYCOSIS WITH PENICILLIN

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Two cases of actinomycosis satisfactorily treated with penicillin are reported. Lyons<sup>1</sup> reported improvement in 4 cases treated with penicillin but stated that a longer follow-up period was necessary. Herrell<sup>2</sup> treated a case of abdominal actinomycosis complicated by carcinoma of the colon with unsatisfactory results. In 3 cases of maxillofacial actinomycosis he considered recovery satisfactory. Florey and Florey<sup>3</sup> believed that in their 2 cases dosage was inadequate. Christie and Garrod<sup>4</sup> treated a patient with actinomycosis of the chest wall and lung, who subsequently died from infection introduced by penicillin intravenous drip. At autopsy they observed disintegration of the fungus colony, which they believed might have resulted from treatment.

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### CASE REPORTS

**Case 1**—The patient was a white woman, aged 44. She was admitted to the hospital in May 1944. In January 1943 a supracervical hysterectomy was performed in another hospital. Soon after operation abscesses and multiple fistulas developed. X-ray showed a communication between one fistula in the lower left abdomen and the small bowel and vagina. A second sinus draining from the left iliac region and a third from the lower right chest wall did not communicate with a viscus.

For sixteen months prior to penicillin treatment, the patient had a slight temperature elevation daily, was unable to be out of bed, lost weight, and had no appetite, and the sinus tracts drained pus continually. The pus contained sulfur granules and actinomyces. The patient was hospitalized and during a thirty day period received a total of 2,000,000 units of penicillin by intramuscular injection of 15,000 units every three hours. The sinuses were irrigated with a 5 per cent penicillin solution four times daily. She gained 30 pounds, regained her strength and appetite, and was ambulatory when discharged from the hospital. The temperature returned to normal, and drainage from the sinuses gradually subsided. A few weeks after discharge the chest sinuses and the fistulous communication with the small bowel and vagina closed.

**Case 2**—A white woman, aged 44, was admitted to the hospital in August 1944 with an area of inflammation and draining sinuses on the right lateral chest wall of three months duration. Twelve months previously a supracervical hysterectomy with bilateral salpingo-oophorectomy was performed for chronic pelvic inflammatory disease, tubo-ovarian abscess, and fibromyoma of the uterus. The infected area was incised, drained, and curetted. Microscopic examination of pus showed actinomyces and sulfur granules.

A total of 500,000 units of penicillin was given intramuscularly by injection of 15,000 units every three hours. The sinuses were irrigated with a 5 per cent solution of penicillin four times daily. The inflammatory process subsided, and the amount of drainage noticeably decreased. After discharge, treatment continued by the referring physician brought the total course of penicillin to 2,000,000 units. Follow-up one month later showed a very satisfactory result with cessation of drainage and gradual closing of sinuses.

### SUMMARY

In two cases of actinomycosis treated with penicillin the infection developed after pelvic operations. The diagnosis in each case was proved by the presence of sulfur granules in the pus and by microscopic identification of actinomyces. Both patients had sinuses of the chest wall, and one had additional abdominal sinuses. Neither patient showed improvement prior to penicillin therapy. In one case 2,000,000 units and in the other 4,000,000 units of penicillin was given intramuscularly and by irrigation of sinuses. Pronounced improvement was noted in each case.

### REFERENCES

1. Lyons, C.: Penicillin therapy of surgical infections in the U.S. Army; report. J.A.M.A. 123:1007 (Dec. 18) 1943.
2. Herrell, W. E.: Clinical use of penicillin; antibacterial agent of biologic origin. J.A.M.A. 124:622 (March 4) 1944.
3. Florey, M. E., and Florey, H. W.: General and local administration of penicillin. Lancet 1:387 (March 27) 1943.
4. Christie, R. V., and Garrod, L. P.: A review of the work of a penicillin therapeutic research unit. Brit. M. J. 1:513 (April 15) 1944.