

nasi. Typhoid fever suspected, but Widal was negative. I was unable to define the lesion and requested a consultation with Dr. H. J. Lee of Cleveland who inclined to a diagnosis of central pneumonia. Temperature at consultation 105.5°, respiration 56, pulse 140. Patient restless, insomnia. Expectant treatment advised and I suggested using a mixed catarrhal stock bacterin. Consultant demurred as he thought bacterin useless, but consented to try it. Gave immediately 0.5 c.c. of bacterin used in Case II. Temperature dropped to normal in two hours and child fell asleep. Recovery uninterrupted.

CASE XIV.—Otitis Media. Mary S., 22 years, American. History of otitis media since age of two years. Right ear affected and discharging pus. Dec. 15, 1914, gave 10 minims of a stock bacterin containing, in millions of organisms per c.c., *Staphylococcus aureus* and *albus*, each 600. Dose repeated at five-day intervals and increased to 1 c.c. No improvement. Bacterial diagnosis showed culture of *Streptococcus mucosus*. An autogenous bacterin was prepared, and an initial dose of 30 million organisms was given and increased every five days. Hearing was improved and the discharge had almost ceased when the patient discontinued treatment.

CASE XV.—Bronchial Asthma. Mrs. V., 38 years, American. History of asthma for many years. Gave stock bacterin used in Case II, beginning with 5 minims increased to 1 c.c. and given at five-day intervals. Treatment continued six weeks. No benefit whatever.

CASE XVI.—Bronchial Asthma. Max P., 26 years, American. Asthma several years standing. Patient was laboring for air when he entered my office. Attacks aggravated during wet weather. Diagnosis of bronchial asthma confirmed on physical examination. Dec. 27, 1914, gave 10 minims of stock bacterin used in Case II. Reaction very severe. Repeated 10 minims in one week. Patient stated he would rather have the asthma than the sore arm. Next dose of five minims, given five days from last injection, gave mild reaction and patient reported feeling better. From this on, the dosage was given at five-day intervals for a period of six weeks, the maximum dose being 1 c.c. All asthmatic symptoms cleared up and he has had no return of the trouble.

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## A FATAL CASE OF CEDAR OIL POISONING.

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THE literature since 1845 contains a record of only 19 cases of cedar oil poisoning; 13 were abortion cases, four of them ending fatally. The case which I have to report is that of a young negro woman, 22 years old. The clinical data in the case have been kindly furnished by Dr. S. N. Balderston. Briefly the symptoms were—convulsion, bloody froth at the mouth, irregular breathing, weak pulse, and a cold, clammy skin. The stomach was washed out; the washings had the odor of oil of cedar. Within one hour of taking the oil, the patient died.

The stomach containing 464 grams of contents and weighing 120 grams was submitted to me for examination. Upon opening the stomach a pronounced odor of oil of cedar was noticed. The stomach was hashed and 100 grams subjected to a steam distillation. The distillate yielded but a trace of the oil. The stomach contents were thoroughly mixed and 100 grams acidulated with a few drops of 10 per cent. sulphuric acid and filtered through cheese cloth. The filtrate was extracted with ethyl ether and allowed to evaporate at room temperature. A clear oil was obtained having the odor of oil of cedar. It had an index of refraction of 1.470 at 17° C. From 584 grams of the stomach and contents 5.13 grams of oil was recovered.

A three ounce bottle, bearing a label, "Oil of Cedar Leaf," was found in the room of the deceased.

One ounce had been removed. The oil had been purchased at a neighboring drug store a few hours before the woman became ill. The contents of the bottle had a specific gravity of .9383 at 19° C, and a refractive index of 1.471 at 17° C.

Twenty-five c.c. of the oil was distilled with the following result:

Temp. C.	C.C. Fraction	R. Index at 17 C.
Below 78	0.5	1.365
180	1.5	
196	5.5	1.462
200	11.0	1.466
220	4.0	
230	1.0	1.470
Loss and tarry residue	1.5	
Total.....	25.0 c.c.	

The largest portion of this oil distilled at 200° C. The major portion of pure oil of cedar leaf, distills over below 173° C.<sup>1</sup> The specific gravity of pure cedar leaf oil is from .886 to .920. Pure cedar wood oil has a specific gravity of .940 to .960 and a high refractive index of about 1.505 at 17° C. The above oil examined corresponds more with cedar wood oil than cedar leaf oil.

A number of tests were made on animals with pure oil of cedar leaf with the following results:

Weight	Dose	Symptoms	Duration of Experiment
Rabbit No. 1 647 grams	4 c.c.	Convulsions	Death in two minutes.
Rabbit No. 2 391 grams	1 c.c.	Convulsions	Death in two minutes.
Rabbit No. 3 2000 grams	1 c.c.	Sluggish	
Rabbit No. 4 2000 grams (pregnant)	1 c.c.	Sluggish	Aborted during the night; did not die.
Rabbit No. 5 2599 grams	1 c.c.	Sluggish	Did not die.
Rabbit No. 6 3104 grams (pregnant)	1 c.c.	Convulsions	Died in two minutes without aborting.
Dog No. 7.. 5.5 kilos (pregnant)	4 c.c.	Convulsions	Died in fifteen minutes without aborting.
Dog No. 8.. 6.0 kilos, 1st day	2 c.c.	No effect	Twelve hours.
Dog No. 8.. 6.0 kilos, 2nd day	3 c.c.	No effect	Twelve hours.
Dog No. 8.. 6.0 kilos, 3d day	4 c.c.	No effect	Twelve hours.
Dog No. 8.. 6.0 kilos, 4th day	10 c.c.	Vomited	After six hours began to eat, active as ever.
Dog No. 8.. 6.0 kilos, 5th day	17 c.c.	Vomited	Had tetanic convulsions, appeared to be in great pain, stertorous breathing, pupils dilated, would bite at wire cage. Unconscious part of the time. Had violent tetanic convulsions every ten minutes for one hour. Urine voided had odor of oil of cedar. Dog lived ten hours, appeared very weak and in pain, was then anesthetized with ether until heart stopped.
Dog No. 9.. 8 kilos	25 c.c.	Convulsions	Vomited, died in 50 minutes.

A small dose seemed to have a greater effect on pregnant animals than on non-pregnant animals. A post mortem examination on dog No. 7 showed an intense hyperemia of all organs. The fetal membrane showed extreme venous engorgement.

I am indebted to Dr. H. G. W. Reinhardt, Coroner's Physician, for a brief synopsis of the necropsy findings twelve hours after death.

There was an edema of both lungs. The heart was normal in size, the myocardium, endocardium, and the valves appeared normal. There was an increase of the pericardial fluid. The peritoneum was smooth and glistening; the vessels of the omentum, mesentery, and pelvis were deeply injected. The stomach was acutely dilated. The subserous vessels of the lesser and greater curvature were intensely engorged. Upon opening the stomach a strong odor of oil of cedar was noticed. The serosa of the small intestine appeared normal; there was a distinct hyperemia of the mucosa of the large in-

testine. The liver was slightly enlarged, with intense congestion. The pancreas appeared normal. The spleen was of normal size. The kidneys were slightly enlarged, of a dark red color, the capsule stripped easily leaving a smooth surface. On section both cortex and medulla appeared hyperemic. The urinary bladder was empty. The mucosa was hyperemic. The uterus was enlarged and contained a fetus of about six weeks gestation, the membranes were intact. The ovaries and tubes were markedly congested. The right ovary was enlarged and upon section a corpus luteum of about .75 cm. in diameter was found.

A few cases<sup>2</sup> of accidental poisoning have been reported. One of these was due to a pharmacist's error.<sup>3</sup> In another case the oil was used in the treatment of gonorrhea.<sup>4</sup> Wait<sup>5</sup> reported four cases, in one of which a young man who had seduced a girl was convicted of her murder. In the second case a young woman, age 26, who took a "large spoonful" recovered with treatment. In a third case, a girl 17 years of age, took one ounce and recovered with treatment. In the fourth case, a woman, age 32 years, died within one hour from taking an unknown amount. Branden<sup>6</sup> reports a case in which a woman recovered from taking one drachm. In Thompson and Archibald's<sup>7</sup> case, in which an unknown amount was taken, the woman died. In Brown's<sup>8</sup> case, the woman took one-half ounce of oil without aborting. The symptoms consisted of dizziness, frothing at the mouth, violent convulsions, unconsciousness, dyspnea, cold perspiration, and suppression of the urine for 36 hours. Other cases<sup>9</sup> have been reported, but in no instance did the woman abort.

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### Medicolegal Notes.

**Malpractice—Pleading Specific Act of Negligence.**—In an action for alleged malpractice in the treatment of the plaintiff's husband during an attack of typhoid fever which resulted in his death, the plaintiff alleged a specific act of negligence, namely, the prescribing for the patient a diet of poached eggs and toasted bread, whereby his bowels were perforated and torn, it was held that, the plaintiff having charged the defendant with a specific act of negligence, could not, under that charge, introduce evidence of other acts and attempt to show negligence therein, although she was not obligated to plead her evidence or set out in detail specific acts, and judgment for the plaintiff was reversed.—*Ennis v. Banks*, Washington Supreme Court, 152 Pac. 1037.

**Contract for Physician's Services Payable by Installments—Effect of Patient's Death.**—A patient agreed in writing to pay his physician "five thousand dollars for his treatment of locomotor ataxia, divided into payments as follows: Five hundred dollars every three months till paid." The patient took the treatment for twenty months and then died. In an action against his

estate it was held that the physician was entitled to recover the whole of the unpaid portion of the \$5,000. Such a contract is not against public policy. It is an entire contract; and the court will not apply to it the principle that in contracts for personal services it is an implied condition that the death of either party dissolves the contract. The court said that a very important thing to be considered in the construction of the contract was that it did not name any period of time during which the treatment was to continue.—*Smith's Estate*, 59 Pa. Superior Ct. 4.

**Infection from Unsterilized Instruments—Hypothetical Questions.**—In an action against a dentist to recover damages for injuries to the plaintiff's jaw, the evidence for the plaintiff tended to show that the defendant after having operated on a patient for an abscess of the jaw, immediately afterwards, without having washed his hands, or cleansed or sterilized his instruments, cut the plaintiff's gum after having drilled a tooth, which was sound, at a point where there was no ulceration, and that a few days afterwards the gum ulcerated, resulting in necrosis of the jaw and the ultimate removal of a portion of the jawbone. It was held that the case was for the jury, and a verdict and judgment were sustained. An expert called by the plaintiff was asked a hypothetical question as follows: Suppose a person after having lanced an abscess in one patient without washing his hands, undertakes to lance the gums of another patient, but before doing so handles the cutting part of the blade of the knife with his hands or fingers, and that second patient develops an abscess at the point where lanced a few days later, to what would you attribute that abscess?" "A. Well, to infection." It was held that the question was a proper one.—*Norwood v. Goeddel*, 58 Pa. Superior Ct. 500.

**X-Ray Photographs—Hypothetical Questions.**—In an action for personal injuries, it was held error to permit doctors, over objection, to testify what an x-ray photograph of the plaintiff's person showed without producing the photograph, for the reason that the photograph was the best evidence.

A hypothetical question, which began: "Assuming that a man whose present condition is as you disclose the condition of plaintiff to be," was held improper, for the reason that the question should have in it all the facts on which the answer is based.—*Hammond v. Bloomington Canning Co.*, 190 Ill. App. 511.

**Injuries from Hot-Water Bottle.**—In an action against a sanatorium and its superintendent it appeared that the plaintiff had employed the superintendent to perform an operation for hernia. After the operation was performed the doctor carried the plaintiff to the room assigned to him and placed him in bed while still under the influence of an anesthetic. A rubber bottle, filled with very hot water, had been placed in the bed, and the unconscious man was laid upon it, and was burned on his back severely. The witnesses described the wound as being 15 to 18 inches in diameter. He also received a smaller burn on his side; the attendants, believing that his struggles on becoming conscious were due to delirium, having held him down on the bed for a time and then turned him on his side. He was under treatment from the burns for a number of months and suffered excruciating pain. The jury found the doctor, but not the sanatorium, guilty, and rendered a verdict for \$5,000, which the trial court reduced to \$2,500. On appeal, the court said that it did not mean to condemn the doctor, nor even to say that he was in fact negligent; but, taking the situation as it found it, and as the jury observed it, there was evidence to justify them in finding that the doctor had not exercised proper care; and, having so found, the court had no right to dispute the verdict. It also held that the damages awarded were not excessive.—*Grosshart v. Shaffer*, Oklahoma Supreme Court, 152 Pac. 441.

**Exemption of Charitable Hospital from Taxation.**—Under section 170 of the Kentucky Constitution, exempting institutions of purely public charity from taxation, a hospital incorporated by trustees as a charitable corporation having no capital stock and holding property for the maintenance of a hospital for the treatment of sick and disabled persons and for medical and surgical treatment and the maintenance of poor persons not able to provide it for themselves, maintained without pecuniary profit, and having funds invested the income of which was used solely in meeting the necessary expenses, was an "institution of purely public charity," whose invested fund was exempt from taxation.—*Mason County v. Hayswood Hospital*, Kentucky Court of Appeals, 179 S. W. 1050.