largest of which are about the size of a pea; they have a yellowish waxy glistening appearance, and consist of pure cystine. The weight of the fragments is eighty-eight grains.

CASE III.—James B., aged 10, residing at Oldham, was admitted into the Manchester Royal Infirmary in March 1870, with symptoms of stone. Lateral lithotomy was performed on May 13th, and he was discharged cured on June 10th. The calculus, which consists of pure cystine, was fractured into three portions during extraction. When put together, the fragments form an oval calculus, about an inch by an inch and a quarter in size. In appearance, it is very similar to specimen No. 1, showing a radiating arrangement, but no indication of any central nucleus. The weight is one hundred and fifty grains.

CASE IV.—John M., aged 57, residing at Staleybridge, was admitted into the hospital in June 1874. Lithotomy was performed on June 14th and 24th, and the patient eventually succumbed to a severe attack of bronchitis. The total weight of the fragments of the calculus, which consisted entirely of cystine, was one hundred and ninety-five grains. Full particulars of this case were published in the BRITISH MEDICAL JOURNAL, December 23rd, 1876.

REMARKS.—The preceding four cases of cystine calculi occur in a collection of fifty-five specimens which were all removed by my father, and are now in my possession. This is an unusually large proportion, when we consider the comparative rarity of this variety of urinary concretion; for in the Museum of the Royal College of Surgeons, out of a total of about one thousand calculi, there are only five specimens of cystine; and in the Museum of Guy's Hospital, out of about five hundred and twenty calculi, there are only six specimens of this variety of calculus. I regret that I have been unable to find any further record of Cases II and III, and all attempts to trace the patients have proved unsuccessful.

It is, perhaps, worthy of remark, that three out of the four cases came from the same locality; that two of the cases occurred in females; and that, in the two cases in which I was able to inquire into the family history, there was no evidence of calculus having been ever present in any other members of the same family.

IDIOPATHIC MYDRIASIS, TREATED WITH ESERINE: GOOD RECOVERY.

By SAMUEL BENTON, L.R.C.P., M.R.C.S.,

Late Assistant Medical Officer to the Central London Sick Asylum Infirmary, Highgate.

NURSE B., aged 26, consulted me on May 14th, 1877. She was suffering from great pain in the left eye, occasioned (as was at once apparent) by dilatation of the pupil; the conjunctiva was also a little inflamed, but this soon subsided. The day before I saw her, she had experienced some little pain in the eye after reading, and they occasionally watered. The patient steadfastly denied putting atropine into or otherwise tampering with her eye.

History.—She was not the subject of hysteria; did not suffer from worms, and had not had syphilis or rheumatism; but was a healthy young woman. The only illness she remembered having was typhoid fever in 1872; a severe attack, but from which she made a good recovery.

There was no strabismus, and both eyes were of normal tension. The left pupil was very much dilated, and would not yield to strong light. It was interesting to notice the sympathetic movements of the iris in the right eye, when the hand was placed over its fellow. The disc and fundus of the left eye were perfectly normal.

I ordered an aperient, and a mixture containing two grains of quinine, twice a day; chloral and camphor liniment to the brow; also two Calabar bean discs to be introduced into the eye.

May 15th. The Calabar bean discs had failed to contract the pupil. There was acute pain in the left temple and down that side of the face.

May 17th. There was no abatement of the symptoms. The quinine was discontinued; and fifteen minims of tincture of perchloride of iron, and five minims of liquor strychniæ, were ordered to be taken three times a day.

May 19th. The pupil was still largely dilated. The pain was severe across the forehead. There was some photophobia; no strabismus. Distant objects could alone be discerned with the left eye.

On May 20th, six days after the commencement of the illness, there was no alteration in the symptoms. Mr. Bowater J. Vernon kindly saw the patient with me: he confirmed the diagnosis, gave a favourable prognosis, and suggested the advisability of trying alkalies. She was, therefore, ordered to have the following draught three times a day: R. Potassæ bicarbonatis gra. xv; potassii iodidi gra. x; aquæ q. s. ad ʒi. A blister was ordered to be applied to the left temple.

May 21st. There was no alteration. The pain was very severe all round the left brow, and was felt down the left side of the nose. The patient had no sleep.

May 22nd. Three Calabar bean discs were introduced into the eye, with a negative result.

May 23rd. The pain in the eye continued. She slept badly. R. Liquoris strychniæ ℥v; tincture aconiti ℥v; aquæ ad ʒi. Fiat haustus ter die sumendus.

May 24th. One drop of a solution of extract of Calabar bean (two grains to one ounce) was introduced into the left eye.

May 25th. The iris had not yet acted, and the pain was so severe that she was unable to sleep at night.

May 27th. She was sent out of doors for a short walk, in the hope that the sun might stimulate the iris to act.

May 28th. The pupil was still dilated, accompanied with pain in the left temple so excessive that she had not slept for several nights.

May 29th. A subcutaneous injection of one-sixth of a grain of morphia was made last evening, which gave a better night's rest.

May 30th. The morphia injection was repeated. She was ordered three leeches; two applied to the outer, and one to the inner canthus of the left eye.

May 31st. There was no improvement. On examination with the ophthalmoscope, the left pupil was found immovable. There was no diminution of the anterior chamber. The disc, at its upper part, was a little pigmented; but this condition existed in both eyes. There was no cupping of the discs, and the fundus appeared quite healthy.

June 1st. One drop of liquor atropiæ was put into the eye, but it took no effect upon the iris.

June 5th. Another leech was applied.

June 6th. There was no alteration in the symptoms. The left pupil was still dilated, and there was a stabbing pain in this eye at times, increased if anything at night. The tension of the eye remains normal.

June 7th. One drop solution of one grain of eserine in a drachm of water was dropped into the left eye, and, half an hour afterwards, the pupil contracted.

June 8th. She had less pain. The left pupil was a little more dilated than the right.

June 9th. Another drop of the eserine solution was introduced into the left eye, and the patient sent into the country. In a week's time, she was quite well; both pupils acting, and there being no squint and no impairment of vision.

REMARKS.—I am aware that cases of mydriasis, often due to various remote constitutional causes, are not uncommon occurrences in weakly patients, the exciting cause being a draught or sudden gust of wind as that met with in looking out of a railway-carriage; but it is seldom one meets with such an obstinate case as the one I have referred to, extending as it did over three weeks. The above case seems to be occasioned by a freak of the radiating fibres of the third nerve, with some irritation of the sympathetic, probably due to worry and overwork; and is interesting in showing how eserine will sometimes restore power in the iris, when Calabar bean, atropine, and opium have no effect upon it. The impairment of vision was due solely to the dilated pupil; there was no loss of accommodation, as the patient could see to read quite plainly through a pinhole aperture in a piece of card held close to the eye. I may mention that the eserine used came from Darmstadt, as the sulphate of eserine at present sold in chemists' shops often fails to have effect upon the iris.

A CASE OF PARALYSIS OF THE ABDUCTORS OF THE VOCAL CORDS.

By SOLOMON CHARLES SMITH, F.R.C.P.Ed.,

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A MAN came under my observation some time ago, whose symptoms appeared to be due to paralysis of the abductors of the vocal cords, and, as Dr. Semon's paper before the Clinical Society, and the discussion which followed it, indicate the rarity of the affection, it is probably worth recording.

I first saw the patient on May 16th, 1876, when I found him sitting up in bed, firmly grasping the bedclothes, breathing with the utmost difficulty, every inspiration being accompanied by a loud whistling croupy sound, and being frequently interrupted altogether, so that it was both noisy and jerky, giving the idea that it was interfered with by some loose valvular flap hanging over the glottis. The expiration was, however, perfectly easy, and the voice was hardly affected. When watching the distressed, noisy, laborious manner in which he drew