Part First.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*The Treatment of Erysipelas by the Muriated Tincture of Iron.* By G. HAMILTON BELL, Surgeon, F.R.C.S.E. With Additional Remarks and Cases, by CHARLES BELL, M.D., F.R.C.P.E.

(Read before the Medico-Chirurgical Society of Edinburgh, April 16th 1851.)

It will be generally admitted that practical observations on the treatment of diseases of daily occurrence are more valuable to the medical practitioner than the most interesting descriptions of anomalous cases, however extraordinary in their character, or successful in their treatment. I am convinced, indeed, that the publication of the journals of well employed medical men, giving in detail the treatment of every case occurring in their private practice, would prove most useful to the young practitioner, and be a valuable contribution to our medical literature.

In furtherance of such views, I am anxious to bring to the knowledge of my professional brethren a mode of treating erysipelas, differing from that usually resorted to, but which I have found invariably successful. I have no intention, however, of writing a treatise on a disease so well known, and on which so much has been recently published, because I think my object will be fully attained by reporting a few cases from my own journals, illustrative of my experience, to which will be added some cases of my brother's, Dr Charles Bell, who has adopted the same treatment in this disease.

My purpose then being purely practical, it would be out of place to premise with a disquisition on the nature and causes of inflammation; but in order to explain in some measure the principle by which I have been actuated in employing a powerful tonic in a disease generally occasioning so much fever and cerebral excitement as erysipelas, I consider it necessary to repeat the opinion I have elsewhere expressed,—viz., that “in inflammation, the capillary vessels having apparently lost the power of separating or electing the component parts of the blood which are necessary for functional purposes, and become to a certain extent inert tubes, a stream of blood is admitted,

for the circulation of which they are not calculated.”¹ In other words, I consider that in erysipelas the capillary vessels are in an atonic state.

This hypothesis appears to me to be supported by the effect of the treatment I have adopted in erysipelas,—the cases demonstrating that when an extensive portion of the surface of the body is violently inflamed, producing a high degree of fever and cerebral excitement; on the system being rapidly surcharged with, or brought under the influence of, the muriated tincture of iron, while the cerebral affection and other symptoms of fever subside, the local pain is relieved, and the redness and swelling gradually disappear; and, so far as the tonic medicine appears to be concerned, all this is effected without any appreciable evacuation from the emunctories of the system.

But refraining from theory or speculation, and in the hope that I shall lead to the general adoption of the practice I have suggested, and which I shall illustrate by a few cases, I shall proceed at once to state shortly the mode of treatment I have resorted to, in every case of erysipelas I have attended for upwards of a quarter of a century, without having in a single instance failed of success. I have found that my remedy is not only effectual in removing erysipelas, but that it generally renders the patient more healthy and robust than before the attack of the disease; and in no instance in which I have had the charge from the commencement of the disease has suppuration taken place. I have for a series of years pressed privately on the attention of the senior members of the profession the value of this remedy in the treatment of this always troublesome and often fatal disease; and I have taught many of my junior brethren successfully to combat it. But my prolonged experience of the invariable success of my practice justifies me, I think, in thus bringing it to the notice of the profession generally, trusting that, in the hands of others, it may prove as great a blessing as it has in mine.

Mode of administering the remedy.—Of course the first object is to have the bowels freely acted on. If the erysipelas be mild, fifteen drops of the muriated tincture of iron are administered in water every two hours until the disease is completely removed. When the attack threatens to be more severe, the dose of the tincture is increased to twenty-five drops every two hours, and persevered in night and day, however high the fever and delirium. The only local applications I ever find necessary, are hair powder and cotton wadding. While I depend for the removal of the disease on the chalybeate, it is necessary that the bowels should be attended to throughout the treatment.

Cases.

I. 25th December 1832.—Mrs Naughton, a poor woman, about 60 years of age, of broken constitution, and having what is vulgarly called “shaking palsy”—a state of continuous chorea—had been suffering from erysipelas some days, and I was called to see her late at night. I found her head entirely covered with erysipelas; she was

¹ Treatise on Diseases of the Liver, p. 5.

in a state of great exhaustion, and delirious. Ten drops of the muriated tincture of iron were ordered to be taken every two hours. On the 26th she was calm and appeared easier; cont. tinct. 27th.—Quite collected, inflammation and swelling decreasing; cont. tinct.; to have a dose of oil. 28th.—Inflammation rapidly disappearing; nourishing diet; continue drops. 30th.—Recovering fast; *perge*. 2d January.—Erysipelas gone, and the poor woman wonderfully well.

II. 20th May 1835.—I was called to the Waterloo Hotel, at 1 o'clock P.M., to see R. R., Esq., a stout gentleman, of full habit, about 30 years of age. I found him suffering from excruciating pain in the soles of the feet, which he ascribed to cold he had caught the previous day in coming from Glasgow. The pain was so acute that he could not bear the weight of the bed-clothes, nor his feet to be touched in the gentlest manner. Tongue loaded; pulse irregular, but not accelerated; skin of natural temperature, except on the feet. Eighteen leeches were applied, and he had six grains of calomel, followed in three hours by a dose of the compound powder of jalap.

Vespere.—Pain of feet relieved, but there is excessive prostration of strength. Tongue still loaded; thirst; pulse irregular and unsatisfactory. The medicines had acted freely, and brought away a quantity of dark coloured offensive scybulous matter. Slight erysipelatous blush on the right ankle. The following medicines to be given immediately:—Calomel, five grains; henbane, six grains; opium, one grain; James's powder, three grains, in the form of pills.

21st.—Slept well; pain of feet much diminished; right ankle swelled and red; complains of pain behind the knee; much thirst; skin natural; pulse 120, irregular; the evacuations from the bowels black, watery, and offensive. A tablespoonful of a mixture containing one part of the spirit of Mindererus and two of camphor mixture, to be given every two hours. Hair powder and cotton wadding to be applied to the feet and ankles. 2 P.M. No improvement; spots of erysipelas at the roots of the toes and over the instep, extending to the ankles. In consultation with Dr Abercrombie, the following medicine was ordered:—Half a drachm of the compound powder of jalap and ten grains of rhubarb. The camphor and sp. Mindereri to be continued. 5 P.M.—No improvement; pulse 130. 8 P.M.—Dr Abercrombie again saw him. Erysipelas rising on the leg; vesicles on the instep; tongue much loaded; stools black and unwholesome; prostration continuous. I explained to Dr Abercrombie my mode of treating erysipelas, and obtained his assent to the exhibition of the muriated tincture of iron,—twenty drops were ordered to be given every two hours. A colocynth pill to be taken at bed time. *Midnight*.—Bowels freely moved; two doses of the tincture of iron had been taken; pulse 100, fuller, and more regular; skin hot. The colocynth pills not to be taken until the morning. Cont. Tinct.

22d, 8 A.M.—A sleepless night; suffering much from rheumatism in right arm; less pain in the soles of the feet; erysipelas not extending; pulse 100, full and soft; bowels not open; to have the colocynth pills. *Noon*.—With Dr Abercrombie. Tongue cleaner; skin soft; erysipelas diminishing; rheumatism very severe in right arm. To continue the iron, and to have forty drops of colchicum wine three times a-day. 7 P.M.—With Dr Abercrombie. The symptoms more satisfactory; perspiring; *perge*. The improvement continued, and on the 25th the erysipelas had entirely disappeared. The rheumatism was more obstinate, but Mr R. returned home in perfect health on the 6th June.

I have seldom seen more alarming exhaustion than appeared in this case for the first six-and-thirty hours after the attack.

III. 6th March 1841.—Mrs W., æt. about 40, of full habit, complains of having a painful boil above the ear; there is also a patch of erysipelatous inflammation extending over the cheek; the ear much swollen. To have fifteen drops of the muriated tincture of iron every three hours; hair powder to be applied to the inflamed surface.

7th.—Boil better, but erysipelas extending all over the side of the face. To continue the steel drops.

8th.—Erysipelas subsiding. To have an aperient; cont. tinct.

12th.—Patient well.

IV. 7th July 1843.—Mr A. W., æt. 16, a stout youth, of florid complexion, attacked with fever and headach. Ordered a dose of calomel and antimonial powder, to be followed by a black draught.

8th.—Erysipelas appeared over side of the face, with much fever; bowels free. To have ten drops of the muriated tincture of iron every two hours.

9th.—Less fever; erysipelas arrested; cont. med.

10th.—Disease stationary. The tincture to be increased to twenty drops every two hours.

12th.—Considerable improvement.

15th.—Erysipelas gone.

V. 10th December 1845.—R. S. W., Esq., æt. 50, a delicate man, having had his constitutional strength injured by an accident in early life. I was called to the country to see him, and found him suffering a severe attack of erysipelas on the right side of the head; ear much swollen; pulse 100 and throbbing; great thirst; tongue furred; slight confusion of head; bowels open by medicine. Fifteen drops of the muriated tincture of iron to be taken every three hours.

11th.—Very ill; erysipelas extending; severe headach; troublesome dry cough. The chalybeate tincture to be continued; to have a cough mixture and effervescing draughts.

12th.—Less confusion of ideas in the morning, but erysipelas extending all over the face, which was much swollen.

Vespere.—Very restless. To have half a drachm of the solution of morphia in an ounce of camphor mixture at bed-time; the tincture continued.

13th.—Erysipelas extending, covering nearly the whole head and face. Had not taken the drops regularly; bowels free; the drops resumed.

14th.—No improvement; the head an inflamed mass, and much swollen; takes nothing but water; cough troublesome; mind wandering. To continue the tincture, and to have an aperient.

Vespere.—A diminution of the inflammation, and swelling of the side of the head first affected.

16th.—No amendment; left side of the head tremendously swollen; very incoherent all day. I remained with my patient during the night, and induced him to take the drops regularly.

17th.—A most satisfactory change; quite coherent; pain and swelling of face diminished, although quite a mask of dried exudation. To have an aperient, and continue the tincture.

18th.—Watched and administered the drops during the night, and to-day there is a wonderful improvement in all his symptoms. To continue the medicine.

21st.—Doing well.

1st January.—Has had no interruption to his convalescence, and feels in better health than before his illness.

There was, probably from the state of the patient's mind, much irregularity in the administering the steel drops until I personally watched the case; and, on the 16th, the disease had assumed a very alarming appearance; but immediately upon the medicine being regularly given, so as to bring the system thoroughly under its influence, a most satisfactory change was produced in the symptoms; the fever, and delirium, and pain subsided, calm sleep was induced, and the inflammation gradually disappeared.

VI. 16th January 1850.—Miss C. M. seized with pain, inflammation, and swelling, extending over both cheeks and nose. Pulse 100; tongue loaded. A dose of calomel and James's powder ordered to be given at bed-time, to be followed in the morning by hourly doses of the solution of Epsom salts and tart. emetic, until the bowels should be freely moved.

17th.—Face more swelled and inflamed; pulse 80; tongue cleaner. To have fifteen drops of the muriated tincture of iron every three hours; hair powder to be applied to the inflamed surface.

18th.—Face less painful. To continue the drops regularly, and to have an aperient.

19th.—Face entirely encrusted with exudation, having very much the appearance of the advanced stage of confluent small pox; erysipelas not extending; no fever; tongue clean, but much annoyance from cough. To have a cough mixture, and continue the drops. 20th.—Improving. 21st.—Doing well.

22d.—So much better as to be in the drawing-room. The disease happily left no sort of mark on a face of much beauty.

VII. 1st November 1850.—W. C., Esq., æt. 73, had been suffering from a severe catarrh and cough for some days. Felt yesterday as if his shoe were too tight for the left foot, and on going to bed the ball of great toe became agonisingly painful; no sleep nor ease in any posture. Ball of toe is much swelled and tender to the touch, having all the character of gout, but the inflammation is erysipelatous, extending over the front of the foot. Pulse 60, irregular; bowels open from medicine; tongue clean. Fifteen drops of the muriated tincture of iron to be taken every three hours.

Vespere.—Mr C. declares that the drops acted like a charm, and at once relieved him from the pain. Redness and swelling continue. To have an aperient, and continue the drops.

2d.—Scarcely any pain, although the inflammation is extending. A troublesome cough. The dose of the tincture to be increased to twenty-five drops. To have paregoric for the cough.

3d.—Inflammation spreading towards instep. To have an aperient pill, and morphia lozenges for the cough. Continue the drops.

4th.—Inflammation fading.

5th.—Improving.

8th.—Able to go out of doors.

I have in my journals several cases in which erysipelas was combined with gout. Two of these occurred in gouty subjects, and in both the health was restored by the chalybeate, as in the above case of Mr C. This gentleman had, two years ago, an attack of erysipelas in his thigh, and was cured by the steel drops. He never had gout before, but I understand his father had suffered from it.

With regard to the diet of the patient under erysipelas, unless when there is much fever, I always recommend it to be generous, and of easy digestion. In a case at present convalescent, in which the attack was very similar to Mr C.'s, only that while the great toe and foot were violently inflamed, the knee of the other leg was also affected. From the habits of the patient—a constitution broken from intemperance—I was obliged to allow, along with the drops, nearly a bottle of port a-day. In this case the podagral erysipelas has disappeared, and my patient is in better health than he has had for many months.

G. H. B.

ADDITIONAL REMARKS, WITH CASES. BY C. BELL, M.D.

My attention having been early attracted by the success of my brother's treatment of erysipelas, by the tincture of the muriate of iron, I now, after many years' experience of its use, unhesitatingly express my opinion in its favour. I have prescribed it both in the

idiopathic form of the disease and in that consequent on external injury, with the most satisfactory results; and I have found it equally efficacious at every period of life, from early infancy to advanced age. It not only removes erysipelas in a remarkably short time without weakening the patient, but it effects such an improvement in the system, that those who are subject to periodical attacks of the disease are rendered much less liable to have a return.

The beneficial effects of this medicine are so immediate and inviolable in the common forms of erysipelas, that I feel convinced were it given with boldness and perseverance in puerperal fever, which is now generally admitted to be analogous in its nature, and frequently accompanied by erysipelatous inflammation on the surface of the body, many valuable lives might be preserved.

In pursuing the chalybeate treatment of erysipelas, I consider it of much importance to bring the system rapidly under its influence, in order to effect a speedy removal of the disease. I have therefore been in the habit recently of giving much larger doses of the tincture than I ventured to prescribe at first. It is a remarkable circumstance in the exhibition of this valuable remedy in the erysipelatous diatheses, that although given in much larger and more frequently-repeated doses than have been recommended in our dispensaries, it never produces headach, and when this symptom is present it quickly relieves it; at the same time, it reduces and regulates the pulse: Thus showing that in this state of the system, it has a soothing and sedative, as well as alterative effect.

The cases I have just read, prove so clearly the remarkable influence which this medicine has in overcoming the idiopathic form of erysipelas in the adult, that I consider it almost unnecessary to increase the length of this paper by producing additional evidence on the subject, although I have had many cases illustrating the fact in my own practice. I am more anxious to direct attention to the advantages to be derived from this mode of treatment in infantile erysipelas, in which the field for curative measures is so very limited; and also to its effects in that form of the disease consequent on external injury, in which the best treatment has hitherto been too often unavailing, especially in our hospitals, and after operations. With this view, I shall now briefly relate a few cases illustrative of the treatment in each of these forms of erysipelas.

On the 27th March 1849, I was requested to see Mrs Munro's baby, of a few weeks old, which was suffering from a severe attack of erysipelas, extending from the wrist to the elbow. I ordered it to have a dose of castor oil immediately, and two drops of the tincture of the muriate of iron, to be given every two hours in a teaspoonful of water, with a little sugar. In three days, the erysipelas had entirely disappeared, and the infant seemed lively and in good health.

Mrs M.'s baby, an extremely emaciated infant, born on the 24th January 1850, was seized a few days after birth with erysipelas,

which occupied the vulva and nates, and was accompanied by severe catarrh and cough. There were much fulness and tension of the lower part of the abdomen, the urine was retained, and the bladder could be felt like a small orange immediately above the pubis. Being naturally weak, it soon became so excessively feeble that no hopes were entertained of its life being preserved, and it was deemed advisable to have it christened without delay.

Small doses of calomel and James' powder were given at short intervals, along with a cough mixture composed of ipecacuan wine, carbonate of soda, water, and syrup. Very little benefit seemed to arise from this treatment; I therefore stopped the calomel and antimony, and ordered two drops of the tincture of the muriate of iron to be given every two hours in a little sugar and water. The infant had become so exhausted, that I was obliged for some time to order, in addition to the tincture, a drop of brandy to be given every half hour.

Under this treatment, the erysipelas and dysuria rapidly disappeared, and the infant slowly gained strength, and is now a lively and healthy child.

Mrs C.'s baby, a fine healthy looking infant, was born on the 27th September 1850, with six fingers on each hand. A few days after birth, erysipelas appeared on the vulva and nates, accompanied with a disordered state of the bowels and frequent green evacuations. Having endeavoured for some time to correct this state of the bowels with small doses of grey powder, rhubarb, and the carbonate of soda, and occasional doses of castor oil, without effect, I ordered two drops of the tincture of the muriate of iron to be given every two hours in a little water and sugar. For some time little progress, however, was made in removing the erysipelas. One day it seemed to subside, and on the subsequent day it was as bad as ever. I was induced to believe that the medicine was not given regularly, and that some days it was not given at all. There was reason also to suspect that the nurse's milk was bad, as I was informed that her own child had been affected in the same manner. I recommended that another nurse should be got, and insisted on the muriated tincture being given regularly. The result was that the erysipelas was removed, and the child's health so much improved, that Mr Syme was enabled, within ten weeks after its birth, to remove the supernumerary fingers with success.

I shall now give a few cases of sympathetic erysipelas, or that consequent on external injury. Mrs D., of broken constitution, received an injury on her nose, which slightly abraded the skin. Erysipelas of the upper part of the face soon followed. She was put on the tincture of the muriate of iron, and in three days the disease was entirely removed.

3d September 1850.—I was requested to see Mr Thomas Ewart, railway guard, who was said to have met with a serious accident. I found him suffering under phlegmonous erysipelas, extending from

the ankle to the knee,—the consequence of a slight bruise he received on his shin about a fortnight previously, and which he had neglected. The usual treatment was adopted, viz., evaporating lotions, poultices, and incisions, along with internal medicines, such as calomel and antimony, with saline draughts; but with no improvement in the leg,—there being much swelling and inflammation, and the wounds had a dry and unhealthy look. For some days I had great fears that the patient would sink under the disease; and my apprehensions of his ultimate recovery were much increased when erysipelatous inflammation appeared above the knee and extended to the hip, occupying the whole of the posterior part of the thigh. There was a considerable degree of fever, pulse 110, flushed face, headach, and severe cough.

Twenty-five drops of the tincture of the muriate of iron were ordered to be given in water every two hours, along with a diaphoretic mixture, containing the solution of the acetate of ammonia and antimonial wine. The bowels were kept open by saline medicines.

The headach and fever soon subsided, and the erysipelas disappeared from the thigh. The leg healed slowly, in consequence of the extensive sloughs which formed round the incisions, and the luxuriant granulations which afterwards formed requiring the frequent application of escharotics. The man ultimately made a good recovery, and returned to his duty in better health than he had enjoyed for a length of time before his accident. I have no doubt had the chalybeate tincture been given at an earlier period in this case, the disease would have been checked in its commencement, and no sloughing would have taken place. I am the more convinced of this from the result of the following case.

On the 4th December 1850, I was called a few miles into the country to see Mr T.'s son, aged about four years. He had always been paralytic in his right leg, in consequence of an accident it was supposed he had met with when an infant. For some time previous to my seeing him, he had suffered from a painful swelling on the right side of the anus, which suppurated, and was opened by the family surgeon, and a large quantity of pus discharged; but the abscess showed no tendency to heal. While playing on the carpet, he slightly bruised the skin of his left leg under the knee, which was immediately followed by erysipelas extending from the knee to the ankle, and accompanied by high fever and rapid pulse.

Small doses of calomel and antimonial powder were ordered to be given every three hours during the day, and a dose of the essence of senna in the morning. In addition to these medicines, to have three drops of the tincture of the muriate of iron every two hours in thin syrup. The leg was dressed with flour and cotton wadding.

5th.—The erysipelas more generally diffused over the leg. To

stop the calomel and antimony, but continue the chalybeate tincture, and keep the bowels open with the senna.

8th.—The erysipelas quite gone, and the original wound under the knee healed. No fever; tongue clean; and the little patient more cheerful than he had been for a length of time.

In conclusion, I shall shortly refer to two cases of idiopathic erysipelas, in which I was consulted some years ago. The one case occurred in a gentleman nearly eighty years of age, who had long been subject to periodical attacks of erysipelas in his legs. I recommended him to take the tincture of the muriate of iron; which removed the attack he was then suffering from, and he remained longer free from the disease than he had done for a number of years. He lived until he was eighty-six years of age.

The second case was that of a gentleman of high talents and acquirements, rector of an academy in the south of Scotland. He had an alarming attack of erysipelas, and was attended by two intelligent medical men, who had adopted all the usual remedies with very little advantage. They, therefore, considered his case hopeless. The erysipelas was extensively diffused over his head and shoulders; there was much incoherence and great debility. Immediately on his system being brought under the influence of the tincture of the muriate of iron, the disease subsided, and he was gradually restored to health.

C. B.

ARTICLE II.—*Evidence of Puerperal Fever depending upon the Contagious Inoculation of Morbid Matter.* By Dr F. H. ARNETH, of Vienna.

(Read before Edinburgh Medico-Chirurgical Society on April 16th, 1851.)

THERE is, perhaps, no subject in medicine that has excited so much of the attention both of the medical profession and of the public at large, as the epidemic puerperal fever, sometimes prevailing to a fearful degree in lying-in hospitals. So strongly, indeed, has the apprehension of the public been excited, that the entire closure of lying-in hospitals has been repeatedly urged, even by professional men; and some of them have really been shut up for a certain time.

Whilst I am fully convinced that the facts I shall have the honour to communicate to the Society, illustrative of one of the most frequent causes of so dreadful a disease, and of a means preventive of its spreading so fearfully, will prove interesting, I have serious doubts as to my being competent to do justice to the subject in a language with which I am but imperfectly acquainted.