sterility is probably due to the structural and developmental abnormalities in the uterus induced by the abnormal diet. It has been shown² that the consumption of meat per head in this country is to-day almost seventeen times as great as it was in 1850. During the same period the fall in the birth-rate has been most marked.

While it would be unwarrantable to attempt to found any theories in regard to the falling birth-rate on the results of this limited experiment, yet, when we add to the above facts the further consideration that the diminished birth-rate is most marked in the better-off classes of society—that is, among the very classes whose means permit of an unrestricted use of the more expensive meat diet—it is evident that the food factor is one which is at least worthy of consideration in dealing with the great question of the falling birth-rate.

REFERENCES.

¹ *Journal of Physiology*, vol. xxxiv. ² *Lancet*, July, 1905.

A CASE OF SUDDEN DEATH AT THE CLIMACTERIC.*

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On August 3rd, 1906, I was hastily summoned to see a woman who was said to be in a fit. I was on the spot within a few minutes, reaching the house at 9.10 a.m. I found her lying supine on a sofa dead.

She was a highly-respectable woman, aged 45 years. The history of this fatal attack was as follows: She rose as usual at 5.30 a.m. on the morning of her death, and attended to the requirements of the house, taking only a cup of tea with her husband, who left for work at 6 a.m. She was quite cheerful and complained of nothing. Her next door neighbour saw her at 7.20 a.m., and remarked that she looked "faint and rather bad"—lately a not unusual thing with her, as she knew the "change of life" was about her. She said she began to "feel queer" about 7 a.m. Her neighbour gave her some hot tea at 7.30 a.m., which was quickly vomited. Smelling salts were administered as she continued to feel faint, and eventually her husband was sent for. Although so faint she was cheerful, and quite thought she would soon be feeling better; she retched two or three times but brought nothing up after the first vomit. At 8.45 a.m. she seemed to change suddenly; the hands became clenched, the face somewhat dusky, and the nails discoloured; she said she felt very cold and she looked as if a "fit" were impending. A few minutes later, and quite suddenly she changed again for the worse, became unconscious, gave three blowing expirations, and then seemed as dead. When questioned as to why I was not sent for sooner, the neighbour said she had seen her in many previous attacks quite as bad as, or even worse than, this one, except for the sudden and unlooked-for change at the end.

The recent history of this woman was thus: For the last year she had suffered from occasional severe headache; for the last six months she had been subject to "fainting turns," with frequent retching, such attacks lasting half an hour to an hour, when she would be all right again; the attacks always occurred early in the morning. The frequent flushes and cold sweats of the climacteric were experienced, and irregular catamenia, of late every two weeks or so, not much loss, but extending over a longer period than normally. The last menstrual period was a week previous to the fatal attack. She was a healthy, cheerful, bright, and happy woman. She had borne seven children, five now living. Her father died suddenly at the age of 60.

The autopsy revealed nothing, all organs and structures being normal, with no signs of internal haemorrhage or of poisoning.

The following points are especially worthy of note: (1) The fatal attack occurred during the climacteric; (2) attacks of a similar nature (except for the fatal termination) had occurred before; (3) the attacks were always in the morning; and (4) absence of any signs of disease *post mortem*.

It is a well-known fact that the nervous organization of most women is put to a considerable strain during the climacteric, and attacks similar to the one recounted above are common enough, being reflex in origin, and always occurring early in the morning, in which respect the attacks are analogous to the vomiting of pregnancy. Whereas the symptoms associated with the climacteric are not usually of a serious character, I take it as quite within the bounds of possibility for an attack such as I have described, and originating in the genital organs, to so act

reflexly that the balance would turn towards death instead of towards recovery. For have we not in this case the evidence of the neighbour who said that she had seen the deceased in attacks worse than this last fatal one, except for the immediate change at the end? Yet from these sufficiently serious attacks she had always previously recovered. Be it noted that this change at the end of the attack was a matter of a few seconds—it was truly a case of *sudden death*. The negative result of the autopsy also supports me in this solution of the cause of death. In my evidence at the inquest I gave as the cause of death "asthenic syncope immediately dependent upon the climacteric." Such a cause of death, although rare, seemed to me to be so obvious that subsequently I was indeed surprised to find no record whatever of any similar case; after searching numerous authorities, I have failed entirely to discover that the climacteric has been held to account for sudden death; hence my paper with a view to ascertaining the opinion of others.

A NOTE ON THE USE OF THE BLUNT HOOK.

By J. EDWARD GODSON, M.B., B.Ch.BIRM.

THE point I desire chiefly to emphasize in the following report is the comparative ease with which delivery was effected with the blunt hook in a case which presented elements of great difficulty. As a matter of fact, I doubt if any other means could have been successfully employed without recourse to anaesthesia, and this, too, where the use of chloroform was practically inhibited.

Mrs. G., an 8-para, with advanced mitral disease, commenced labour on April 4th, 1907, and after several pains the membranes ruptured and the waters escaped in one gush. The pains then abated, but continued at intervals of about an hour. Her last two confinements had been prolonged and severe; the sixth a shoulder presentation, the seventh a vertex terminated by high forceps extraction. In her case there were several causes inevitably tending to produce difficult labour: constitutional debility, uterine inertia, swelling and oedema of the soft parts, and above all marked contraction of the A.P. diameter at the brim produced by projection of the sacral promontory.

I was called to see her on April 5th, and found the os uteri the size of a sixpence, the soft parts very oedematous, and a breech presentation (abdomino-anterior position) with the legs fully extended on the trunk. As labour was progressing naturally, I judged it unwise to interfere at this stage, and contented myself with watching her closely during the next forty-eight hours. The general condition continued good, the uterine pains were hesitating, long-delayed, and inadequate, the dilatation of the os was progressive but tardy, and there was a free escape of meconium. On April 7th the patient was in much the same condition, but suffering from want of sleep and inability to take nourishment, while the uterine contractions still came at half-hourly to hourly intervals, and the oedematous os would now admit the tips of four fingers. After some hesitation I determined to leave her yet awhile, being chiefly influenced by the long-interval character of the pains, the desirability of further modelling and descent of the breech, the danger of chloroform with the heart so faulty, and the difficulty of working without it in so confined a space, and with the presentation so high up. The rectum was emptied by enema, the vagina washed out with antiseptic douches, four 5-grain doses of quinine were given every four hours to whip the uterus into quicker action, and liquid food was administered regularly. Under this treatment the pains became more frequent, and the os was fully dilated by 10 p.m., but to counteract these advantages the patient had an alarming attack of syncope, and the breech became impacted. I tried to break up the presentation and bring down a leg, but found this even more impossible now than it had been at an earlier stage. An attempt to get a fillet over the thigh was equally unsuccessful; while the forceps were easy to apply and equally easy to withdraw, as they failed to obtain an efficient grip.

The blunt hook remained as a final resource, the instrument to hand being of an obsolete pattern with an internal diameter of 1½ in. A small hook is easier to use than a large one, but possesses certain dangers and disadvantages of its own; the device by which I have attempted to overcome these will be mentioned later on. I applied the instrument without difficulty, and extraction of the breech followed with greater readiness than might have been anticipated. The shoulders—the most massive I have ever seen in a newborn child—caused considerable delay, but this did not matter much as the child had evidently been dead for several days. The final stage of delivery was concluded without trouble.

The child was a male, at full term. It had an offensive odour, and large surfaces were denuded of epidermis. It was 12 lb. in weight and 23 in. long. The bones of the skull were strong and normally ossified; the occipito-frontal circumference was 15 in., the occipito-mental diameter was 6 in. while the biparietal was 4.50 in. The circumference of the

* Abstract of a paper read before the Medico-Legal Society, March 12th, 1907.

shoulders was 20 in.; of the thorax at the nipples 15.35 in.; of the abdomen at the umbilicus 15 in.; while the bitrochanteric circumference was 15.50 in. In weight, length, and girth it nearly approximated the standard for children in their fourth month, so greatly did it exceed in these particulars the average newborn infant.

The blunt hook is a perfectly safe instrument—except in the hands of the clumsy or ignorant—as far as the mother is concerned. If the child is known to be dead its use is practically free from all danger, but if the child is still alive, then it must be employed with care lest it produce several undesirable results, such as fracture or dislocation of the femur, injury to the genitalia, laceration of the skin of the thigh, or damage to the femoral blood vessels. A large hook is more unlikely to do mischief of this kind than a small one, but it is less easy to apply, less safe for the mother, more difficult to manipulate, and takes and retains a less firm and accurate hold. Moreover, the small hook is the one most generally in the possession either of the purchaser of the wholesale outfit or of the inheritor of ancestral implements. Personally I always use a small instrument, but have attempted to obviate its disadvantages by employing a short second shank made to screw into the free end of the original hook. This device may appear somewhat clumsy, but I have found it satisfactory in practice, as it provides against the chief dangers, converts the hook into a steel vectis, and allows of greater latitude in the direction of the applied extractive force.

The free end of the hook constitutes the chief element of danger in prudent hands, and when the second shank is screwed into position this free end is obviously obliterated. Needless to say, the “blunt hook” should never be employed except in those difficult cases in which Nature has proved inadequate, and when other less stringent means have failed to effect delivery.

A CASE OF EXTRAUTERINE PREGNANCY IN WHICH UNUSUALLY EARLY RUPTURE OF THE GRAVID TUBE OCCURRED.

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EXTRAUTERINE pregnancy is a condition of so much interest on account of its scientific as well as of its practical problems that it appeals to all members of the medical profession. It assumes so many forms and varieties and so many accidents and changes may occur, that any case presenting unusual features deserves record. In the one to be narrated there can be no doubt as to the diagnosis, the rent in the tube being large and clearly visible after the abdomen was opened, and its interest lies in the fact that the rupture took place at an unusually early date, earlier than in any other case of which I have been able to discover a report—after little more than a week's gestation.

History.

At 3.15 a.m. on May 29th, 1906, I received a telephonic communication from Dr. J. Barr Stevens of Renfrew, and as a result I was very soon driving with all speed to Renfrew, where I found Dr. Stevens in anxious attendance upon a lady. She was in a state of collapse, the lips and cheeks were blanched, the pulse was about 180 and soft and thready, the voice was faint and weak, she spoke with an effort; in fact, there were all the symptoms of shock and haemorrhage. The history obtained then, supplemented by what I learned at later dates, was that the patient, aged 30, had been married two years, and had never been pregnant. Menstruation had begun at the age of 14, had from the first always been of the twenty-eight-day type, had continued for six days, and had been unattended with pain or any discomfort. Since her marriage no change had happened, her health had been perfect, and especially there had never been any pelvic disorder. The last menstruation had begun on May 6th, had continued as usual for six days, in every respect had been normal, and had presented the same phenomena as usual. For a week afterwards no coitus took place; regarding that fact the patient was very emphatic, so that we can date its occurrence as being on May 19th—that is, nine days before the onset of her illness. During May 28th she was in her ordinary good health, and went about her household duties as usual. About 6 p.m. she suddenly felt a severe pain in the front of the abdomen, which continued for, she thinks, a minute or two, and was succeeded

by nausea and vomiting. She lay down upon a sofa, and after a short time she rose, and the bowels moved twice loosely. After this she felt very faint and sick, and was put to bed in a semi-conscious condition. Dr. Stevens was obliged to employ every method to keep her alive, injecting strychnine and digitalin hypodermically, giving stimulants by the mouth, and raising the lower part of the body.

It was not possible to make a very thorough examination when I saw the patient. She made no complaint of pain anywhere, but she felt, as she looked, exhausted and collapsed. Some tenderness was experienced upon palpation of the lower half of the abdomen, and percussion showed dullness in that part, reaching well into the flanks. Vaginal examination revealed no change in the cervix from normal; there was no bulging in the lateral fornices nor behind the uterus, and, as far as could be made out from bimanual examination, imperfectly performed on account of pain, the uterus was not enlarged. A little pain was complained of when I made pressure in the left lateral fornix under the site of the Fallopian tube. The breasts were in every detail absolutely virginal.

It was very apparent that the condition was that of internal haemorrhage of a serious nature, and, in spite of the want of evidence as to pregnancy, I stated that my opinion was that we had to deal with the intraperitoneal rupture of a tubal gestation. After waiting and watching for more than an hour, we concluded that the bleeding had ceased for a time, and that an operation, not being urgently required, could be safely deferred to a more suitable time and place. Later on in the day, therefore, an ambulance wagon safely removed the patient, under the personal supervision of Dr. Stevens, to a private nursing home in Glasgow. She rallied to a slight degree, and, carefully watched, passed the night in safety. I delayed in order to allow her to recover from the shock and collapse, as well as to permit the abdominal wall to be prepared for operation, while I was, of course, ready to operate at once in the event of any alarming symptoms appearing.

Operation.

On the next forenoon (May 30th) I opened the abdomen. The dark clotted blood which could be seen beneath the peritoneum spurted out immediately on the latter being divided. Large clots filled up the lower abdomen and lay among the coils of intestines, and when they were cleared out fresh blood could be seen welling up from the pelvis. The Trendelenburg position permitted us then to discover that the bleeding was from a ragged-edged opening fully half an inch in length, situated in the upper surface of the left tube. I at once controlled the bleeding and removed the tube, but with some difficulty, as I was obliged to tie and stitch in the tear, it being so near the junction of tube and uterus while not actually implicating the latter. This unfortunately destroyed the portion of the tube in which the rent had been situated, and consequently only healthy tube was left for microscopical examination. The tissues of the tube at the rent were so friable that one could have imagined that the opening had been formed from below upwards by the action of some corrosive poison, which, in forcing its way outwards, had eaten away the tissues, destroying those in its path, and disintegrating those near at hand. On examination of the right ovary it was found to be enlarged by a cyst to the size of a cricket ball. We examined it carefully, and, finding that the ovary was practically all cyst, with Dr. Stevens's full assent, I very reluctantly removed it. No normal ovarian tissue could be felt or seen; resection was therefore impossible.

After-History.

The patient made a very good recovery, and went home in less than four weeks.

The principal feature of interest in this case is the date of rupture of the tube. Usually it occurs about the sixth to the tenth week. In the *British Gynaecological Journal* for May, 1904, Dr. William Duncan reported a case in which rupture had taken place on the nineteenth day, and he said that, so far as he could ascertain, only one other case had been recorded in which there had been rupture at as early a date. That was one in which it was said to have been on the fifteenth day. The patient was a multipara and had not missed a period. Though internal haemorrhage was diagnosed no operation was performed, and only after death was the ruptured tubal gestation discovered. Dr. Duncan's patient had had previous miscarriages, in the other case the patient was a multipara, and it is conceivable that in neither of these women was menstruation absolutely always regular. The patient on whom I operated had never previously been pregnant. Her menstrual periods recurred every twenty-eight days (“to the day,” as she told me), and the one in May appeared on the day expected, was in every respect exactly like all those which had preceded it, and continued till the 12th of the month. I was assured that there was no coitus until exactly a week after that date. That brings us to the 19th, and the rupture took place on the evening of the 28th, nine days later. So far as I know this forms a record.