REMARKS ON THE TREATMENT OF PURULENT PERICARDITIS.

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DR. BRONNER, in a very interesting case which he records in the *BRITISH MEDICAL JOURNAL* of February 14th, makes one or two remarks which call for comment. He refers to the cases recorded by Rosenstein and myself, which, after the lapse of several years, remain still, as far as I know, the only two successful cases of operation in which recovery was complete, and he goes on to remark upon the rapidity of recovery in these words: "It would hardly seem possible that in this time the pericardial sac could be obliterated by granulations gradually creeping over the heart from the base, as one might expect by analogy with the pleural cavity under similar conditions."

It is dangerous to argue from analogy, especially when the analogy is imperfect. I point out in my original paper that an analogy cannot be fairly drawn between the pleura and pericardium, and that all the advantages are in favour of the pericardium, for the fluid in the sac is no sooner let out than the two layers of the pericardium come into close relation all over, and are therefore in a very favourable condition for rapid adhesion. The rapidity with which such adhesion may take place is demonstrated in a case to which I refer, also in the same paper, but which is reported by me more at length in the *Pathological Transactions* for 1885, p. 104, and of which a full clinical account is given in the *St. Bartholomew's Hospital Reports* for 1883, by Dr. Brinton and Dr. Collings. The case is one of pyæmia, and in this respect also resembles that of Dr. Bronner.

The pyæmia followed a severe fall. An abscess formed in the left shoulder, and subsequently in the right thigh. Left pleurisy developed, which was twice tapped and bloodstained serum removed. An incision was then made into the side; no fluid was found, but instead the pericardial sac was found distended, and this was opened with a bistoury from the wound in the side; twenty-four ounces of pus escaped with very great relief, but the child died fourteen days later. At the *post-mortem* examination, besides the signs of pyæmia mentioned, the left pleura was found divided into three separate compartments. The middle one only had been incised, and the other two contained serous fluid stained with blood. From the external incision the finger could be passed into the opening into the pericardium. This was empty of fluid, and adherent over the whole right upper and chief part of the posterior surface; the lower anterior with the apical portion of the posterior surface was not obliterated, and was covered with flakes of cheesy-looking pus. I think we may fairly conclude that within fourteen days all these adhesions had formed, that is, the greater part of the pericardium had become pretty firmly adherent, and I am inclined to think that more of it was only prevented from adhering by the frequent introduction of a tube which was passed into the opening to keep it free, even up to a short time before death. This fatal case goes far, I think, to establish rapid adhesion, which may occur, and explains the rapid recovery of Rosenstein's case and my own. To me rapidity of cure would be an argument in favour of the pericardium, and not against it, as Dr. Bronner seems to imply.

The dangers of surgical interference with the pericardium, to which Dr. Bronner refers, are, I think, greatly exaggerated. The only risk is that of wounding the heart, and, with care, this may be avoided. Exploratory punctures and paracentesis are, in my opinion, much more risky than incision, especially if the ordinary blunt aspirator needles are used. I have tapped the pericardium now several times, and without a single misadventure. On one occasion I was alarmed by getting nothing but a jet of blood. I at once removed the needle and, of course, drew off no fluid, but whatever it was that was done the patient was greatly relieved, and rapidly improved from the time of the puncture. The chief risk is that the diagnosis is incorrect, and the difficulties are in some cases considerable in distinguishing between a greatly distended heart and pericardial effusion. Even then it is not a clean puncture through the walls of the heart that is

dangerous, for this has frequently occurred as the result of accident, and has even been deliberately performed with the object of tapping a greatly distended cavity. What has produced the fatal result has been, not the clean puncture, but a laceration, as I once saw happen in the practice of a deceased surgeon. With proper care puncture of the pericardium may be performed without any real risk at all, and I have on more than one occasion made an exploratory puncture into it for the purpose of diagnosis, and never, as I have said, with any untoward result.

The dangers, again, of the rapid removal of fluid are, I believe, for the most part imaginary. In my own case, the incision was followed by a gush of pus which spurted out eight or ten inches from the chest; in a few seconds fully two quarts were evacuated, and that without any bad symptoms or even faintness; on the contrary, with immediate relief. In the series of cases I refer to in my paper on Paracentesis Pericardii, there are several in which many pints have been rapidly removed, and in all cases no mention is made of any bad symptoms.

Washing out the pericardium seems also to inspire as much fear in the minds of some writers as the washing of the pleura, and I believe with just a little real ground. In my case, the pericardium was many times washed out, and always without harm; and I may in passing say that, out of the very many times in which I have freely washed out the pleura, I have never experienced any one of the terrifying accidents to which reference is so often made. I believe that, with ordinary care, that procedure is absolutely without risk.

Though I have ventured to make these remarks and criticisms upon Dr. Bronner's case, I wish to congratulate him and those concerned on the skill with which the diagnosis was made and the operation carried out. It was only unfortunate that the nature of the case almost precluded hope of ultimately saving life.

I may take this opportunity of recording the fact that my patient, whose pericardium was opened, washed out, and drained, is at the present time perfectly well. He has developed into a full-grown man, above the average weight and height. Although the pericardium must be universally adherent, there are no physical signs to indicate this. Except for the scar, there is nothing whatever to indicate that he ever had anything the matter with him. He has been for years in active work, and is capable of any ordinary muscular work, and has been only as a matter of precaution cautioned against undertaking work which calls for violent muscular effort.

MEMORANDA: MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

INTRAUTERINE ABSORPTION OF PLACENTA.

THE question as to the power which the mucous membrane of the uterus is able to exercise in the absorption of solid parts of placental tissue is one of which the solution is fraught with great difficulties, and is at the same time one of such importance as to warrant the publication of any contribution which appears to throw light upon it.

That such absorption does occur, and often to a large extent, and without hurtful effects to the maternal organism in those cases where the tissue remains aseptic, is undoubtedly true. In a case, for example, which came under my observation, and where I am certain a large piece of the placenta which was completely adherent to the fundus was left attached, the woman recovered without a bad symptom, although it is likely that some of the portion left would afterwards be discharged with the lochia. The following case, however, proves to my mind conclusively that under some circumstances the absorptive power of the mucous membrane of the uterus on the placental tissues is very great, and as such the case, I think, is worthy of note.

Mrs. S., aged 38, wife of a labourer and mother of three healthy children, on this occasion miscarried about the seventh month of her fourth pregnancy. For the past two months, judging from her own feeling and from the absence