blood, putrefies. If any one were to talk of pouring a quantity of putrid blood into a recent wound, such a proposition would be received with horror; but everybody knows that pretty much the same thing takes place if the blood is allowed to putrefy in a wound. After a few days have elapsed, the wound becomes granulated, and as soon as granulation takes place, if the surfaces are brought together, there is apt to occur union by first intention.

It was shown by Pasteur, conclusively shown, it seemed to me, after reading his experiments, that putrefaction was a fermentation, that it was a manifestation of the existence of a ferment similar to that which exists in yeast.

When that was shown by Pasteur, then at once it occured to me, here is a chance for improvement. We may possibly be able to prevent putrefaction in wounds if the cause of putrefaction in wounds is not the access of air, but of living organisms developed in the air, and which in the blood are the cause of putrefaction; then it may be that we may get hold of some agent which will be strong enough in its action upon this kind of organisms to destroy them without doing damage to the human tissues, just in the same way as crab-lice are destroyed without injury to the skin. So in this case, if we can apply to our wounds some agent which may destroy the minute organisms, which are the case of putrefaction without injuring the wound, the problem is solved —it is no longer a question of hermetically sealing out the air; it is merely applying a dressing that shall act as a germ-destroyer to prevent the influence of these living organisms.

This, gentlemen, is our principle. The agent which we found in the majority of cases most efficient is carbolic acid. It had been used without my knowing it, in a medical ward in the hospital, and with great advantage, as an antiseptic. It had been used, as well as antiseptics of various kinds, for the purpose of *mitigating* putrefaction, not of *preventing* it: that is the great difference.

The principle of antiseptic treatment is to prevent the occurrence of putrefaction in the wound by the presence of the organism with which you have to deal. If you can prevent that, then your wound comes to be in the condition of a simple fracture.

Taking this example of a simple fracture, we feel, as a matter of course, that if we really can by any means adopt such a mode of dressing as shall be equally efficient with the unbroken skin a wound, no matter how severe or contused it may be, and no matter what the patient's constitution, ought to be perfectly amenable to treatment.

You may ask, Why do you disregard the patient's constitution? My reply is, Do you regard the constitutional treatment important in a simple fracture in which we have a severe wound, contused, lacerated, and so on? If you could see such a case, you would say. Here is a wound that will not heal without sloughs and suppuration. Yet because we cannot see the injury, and because the skin is unbroken, we are apt to forget what is really the nature of the injury in a simple fracture, which I venture to say is as bad and much more severe than any that the surgeon ever inflicts. Yet no man regards the patient's condition in a simple case of fracture, but contents himself with the local treatment. If constitutional treatment is adopted at all, it is only in case of constitutional disturbance. . . .

The treatment of an ordinary abscess, acute or chronic, under antiseptic management is, I think, one of the most beautiful points of the whole matter.

Suppose an abscess is opened in the ordinary way, that is, by a free incision. The result is, you get rid of your patient by opening his abcess; the previously maintained suppuration is gotten rid of by relieving the tension; but, instead of the previously existing causes of irritation, you let in a new one, viz., *putrefactive element.* The discharge remaining in the abscess putrefies, and, by reason of its irritating properties, ends in and keeps up the suppuration. But by this means (the antiseptic method) you prevent putrefaction, prevent the access of putrefactive elements, while at the same time you get rid of the tension by opening the abscess and introducing a drainage tube, while the so called-*pyogenic membrane* is left free of any disturbing cause at all, and as soon as the pyogenic membrane is free from disturbance it ceases to be pyogenic.

If you take the two flaps of a patient's thigh where an operation has been performed by the double flap method, and lay the granulating surfaces together—taking away the dressings which our forefathers used to have between the flaps after an amputation to make them lie apart—when you come to see the case next day you will probably find a large extent of these granulating surfaces coalesced near to each other. Well, now, consider these surfaces one moment.

The granulating surfaces have no tendency to form pus unless they are irritated. Suppose that the granulating surfaces have a tendency to form pus, then if the two granulating surfaces are brought together we should have pus secreted. *Impossible.* The secretion would still go on, although the surfaces were thus united and in contact with each other There is nothing to prevent the possibility of the effusion of fluid, if it were the office of granulating surfaces to produce pus. The pressure would lead to tension and the formation of more pus. But even then there is no more serous effusion, that is to say, the serous effusion soon ceases after the granulations are brought together; for if the serous effusion still continued, the granulations could not coalesce. What is the fact that leads to this remarkable result, thatfrom that time forth the formation of pus ceases? It is simply disturbance that keeps it up, and nothing else; but when the granulations are put in contact with each other, they will protect each other perfectly from any irritating cause. The granulations of the previously suppurating wound thus protected, immediately cease to suppurate; very soon after they cease to form serous effusion, the tissues proceed to develop into the higher fibrous tissue of the cicatrix. There, gentlemen, you have evidence that the only thing granulations require is to be *left alone*, free