eurism from a solid thoracic tumor. These pupil and larynx symptoms are sometimes the first symptoms of thoracic aneurism.

Let us now examine the pulsation. It appears to be heaving. Were the second rib out of the way, it is probable the pulsation would be felt to be distinctly expansile, judging from what we feel in the intercostal spaces. It is synchronous with, and considerably stronger than the apex beat of the heart. This is a point strongly dwelt on by Balfour, as the impulse of a solid tumor is seldom as forcible as that of the heart, and never much more forcible. This is true also of an aneurism containing much fibrin. The impulse of aneurism is best brought out by placing one hand over it and the other on the back, and noting the pulsation after complete expiration. There is no thrill in this case, but then thrill is rare in sacculated aneurism.

There is no bruit in this aneurism, but bruit is not a constant symptom in sacculated aneurisms; on the contrary, it is probably absent in one-half the cases. I wish to impress this on you, lest you attach too much importance to it, as is too often done. Note particularly the heart-sounds as heard over the tumor : both are distinct, the aortic being highly accentuated. This is probably quite as distinctive of aneurism as bruit. Note also that a solid tumor, pressing on the aorta sufficiently to cause such distinct pulsation, would almost certainly cause a murmur. I think it certainly would, and no murmur is heard here either over the tumor or along the great vessels. Note next the systolic and diastolic shocks felt on auscultating with a solid stethoscope, such as this. The diastolic shock accompanies the clear ringing second sound. This second shock is most significant of aneurism, 'and is, when preceded by a <sup>8</sup>ystolic shock, probably pathognomonic.

Of all these symptoms, the following point directly to aneurism, viz.: the character of radial pulses, the rhythmic expansile, strong pulsations, the systolic and diastolic shock signs and the accentuated aortic second sound heard all over tumor; one sign, bruit, is absent. Any one of these signs might possibly be produced by any tumor, but the presence of so many of them renders the diagnosis of aneurism positive. The other symptoms, viz.: the pain, dilated pupil, dyspncea, cough, weak respiratory murmur in

right lung, dilated veins, etc., are pressure signs, and might be produced by any tumor. If the condition grows worse, several other symptoms may be added, as dysphagia from pressure on the œsophagus; œdema, local or general, over the region drained by the superior vena cava, change or loss of voice, whiffing respiration, etc. We will not dwell on the differential diagnosis, but only mention the chief diseases liable to be mistaken for aneurism ; solid tumors have already been referred to ; abscess and localized empyema ; aortic valvular insufficiency, especially if the apex of the lung is indurated and retracted, uncovering the aorta ; dilated heart, and pericardial effusion.

The prognosis is, of course, not favorable. The treatment we are pursuing consists of as perfect rest as possible, rising not being allowed on any account; limiting the liquid consumed in 24 hours to about 10 ounces, and solids to 12 or 15 ounces. The bowels to be kept open, so that there be no straining when the bed pan is used. If there is much pain we will try an ice-bag over the pulsating region, having it suspended so that it will only lightly touch the surface, that the pressure may not become irksome. If that is not sufficient then opiates will be given at night as needed. We hope, however, that quieting of the circulation by rest and low diet will so relieve the tension in aneurism that the pain will not be troublesome. For medicines, we are giving iodide of potassium. He is taking 20 grains daily at present; this will be gradually increased to 3 j. daily. How the iodide acts is not known, but great benefit is claimed for it by many good observers. Should all these means fail to give any relief, after a trial of a few weeks, it will be in order then to discuss the practicability of securing the deposit of fibrin in the interior of the sac, by passing a few feet of fine wire into it through a fine canula. Neither this nor any other operative means offer much hope of success, but the pros and cons can be discussed, and if thought advisable laid before him for him to choose.

## TREATMENT OF EMPYEMA.\*

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The object of this paper is to present a tabular view of twenty-two cases of empyema treated in general practice. The cases are too few to base an absolute mode of treatment upon, but they are quite varied in character and may elicit the opinions of others, and so aid in the management of a treatment of disease both common and dangerous.

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