

cells containing broken-up red corpuscles are found in its pulp, and as similar cells were found in the red marrow by Bizzozero, thirty years ago, it also is credited with powers destructive as well as constructive. This, you see, is blowing hot and cold—but that is nothing to some speculators. Diminution in the number of red cells is a feature in many diseases besides the two under comparison, but whether due to a defect of development of erythroblasts or to an actual increase in the destruction of red corpuscle is not clearly determined. To leukemia there is an actual increase in number of the leucocytes, so much so that the first observers of the disease called it pus in the blood. There is an actual destruction of red corpuscles in other diseases; for instance, yellow fever, acute atrophy of the liver, progressive pernicious anemia, paroxysmal hepatic hematuria. In these cases the cause has been attributed to germ poisons or ptomaines, which may either act directly on the corpuscles, or by leading to an excessive production of the bile acids, since George Harley found that injecting bile or bile acids under the skin of a dog's back had a powerful disintegrating effect on the red globules and gave rise to hematuria, which he qualified as hepatic, and since then ordinary chlorosis has been sometimes attributed to the absorption of ptomaines from a color. On the whole, then, there is no satisfactory conclusion to be arrived at as to the cause of the destruction of red corpuscles in leukemia or pseudoleukemia; but the report of Verdelli in the *American Journal of the Medical Sciences* for February, 1894, if confirmed by other observers, will do much to unravel the mystery. Verdelli reports two cases of pseudoleukemia and one of leukemia, in all of which, both by culture from the lymphatic gland, and from the blood, and from sections of various organs, he was able to demonstrate the presence of staphylococci pyogenes in pure culture. In one case staphylococci were found in an axillary gland removed three and a half months before death, in cultures from the blood in the heart two hours after death, and in some cultures from glands removed at the autopsy. In the second case, cultures from an inguinal lymphatic, excised twenty-one days before death, yielded negative results, although staphylococci were found in sections of the gland and in cultures of blood from the heart, femoral veins and other organs two hours after death. In the third case, staphylococci were obtained six hours before death in pure cultures from blood out of a finger, and immediately after death from the spleen and various lymphatics. By introduction of these cultures into the peritoneal cavity and subcutaneous tissues, as well as by the introduction of bits of excised glands into the peritoneal cavity. Verdelli says he obtained the following results in rabbits: