

ULCERS FROM AN EXTENSIVE BURN TREATED WITH BOVININE.

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On the morning of April 28, 1897, I was called to W. T. B., aged forty-three years, engineer in a stove factory, who had been injured by the explosion of the mud drum. I saw him an hour after the accident and found him suffering intense pain, and wildly delirious.

Whisky had been administered to overcome the shock, and three-eighth-of-a-grain of morphine pills to relieve the pain. I immediately gave a hypodermic of morphine, a quarter of a grain, which soon quieted him, and then examined his injuries, finding the following conditions: Upper extremities severely burned about the face, neck, and upper portion of the chest, the left eye, ear, and nose being most severe: left arm, at elbow, wrist, and entire hand: right arm, at wrist. Lower extremities: right buttock over one half of the surface: right leg on the patella, calf, and ankle: left buttock, thigh and leg, over the whole posterior surface, patella, and a strip two inches wide running nearly around the ankle.

The burns were all of the second degree and healed without sloughing, except on the left calf and ankle.

The appearance of the left eye was bad, the cornea being cloudy, and my prognosis was guarded, but the eye afterwards cleared up and the sight is normal.

I dressed the wounds with limewater and linseed oil, equal parts, applying it on old linen cloths saturated with the mixture, and covering it with wadding obtained at a dry goods store.

In the evening when I changed the dressings I found vesicles and large bullæ had formed containing clear serum, the largest to the amount of four ounces, all of which I punctured, removing all loose strips and hanging fold of epidermis.

The limewater and linseed oil dressing were used four days and then discontinued, a dressing of plain vaseline being substituted. As soon as pus began to form the wounds were thoroughly cleansed with corrosive

sublimate solution (1 to 3,000), using small pledgets of absorbent cotton, then dusted with acetanilide and boric acid, equal parts, applied with a pepper duster, and the vaseline dressing applied: dressing changed every twenty-four hours.

The corrosive sublimate solution seeming to cause too much irritation, I changed to two-per-cent carbolic acid solution, which worked admirably.

The eyes were treated with ice compresses, the pupils were kept fully dilated with atropine sulphate, and the following eye wash was ordered: R Acidi boric., sodii biborat., aa.

The internal treatment was with morphine to quiet pain, and aconite when the pulse was too full and strong.

May 22nd, twenty-five days after accident, the wounds were all healed except those of the calf and ankle of the left leg: on the calf was an ulcer eight inches long by four inches wide, and on the ankle a strip two inches wide, running nearly all around the leg, both having a very unhealthy appearance, with deeply cut edges. I concluded it would be necessary to try skin grafting, but wished first to get a healthy granulating surface. It was then I conceived the idea of treating it with bovine blood.

23rd.—I first cleansed the ulcers thoroughly with the carbolic solution, then saturated plain aseptic gauze with bovine and covered the ulcers: over this I put a layer of gutta-percha tissue, and covered the whole with wadding. The following morning when I removed the dressings there was no pus, and healthy pink granulations were springing up over the ulcers. I changed the dressings every twenty-four hours, and could see a rapid improvement each time, the new skin extending in more and more from the edges. Improvement was so rapid I concluded grafting would not be necessary, and continued the bovine dressings, dusting the new granulation with calomel if they became at all exuberant.

June 4th, twelve days after beginning these dressings, the ulcers were entirely healed. I then put on a dressing of plain vaseline, applied a bandage, to be worn during the day as a support to the circulation, and dis-