

It is accompanied by two venæ comites and the posterior tibial nerve, which lies to the fibular side of it. The veins and nerve being separated from the artery, the ligature should be passed from the fibular toward the tibial side.

18. Ligation of the Posterior Tibial Artery behind the Internal Malleolus.—A slightly curving incision an inch and a half long is to be made behind the internal malleolus, and about half-way between it and the tendo Achillis. The skin and superficial fascia having been divided, the deep fascia is to be lifted and divided on a director. The artery will then be exposed, accompanied by its venæ comites and the posterior tibial nerve, which lies to the back of it and toward the fibular side. The ligature should be passed from behind forward.

19. Ligation of the Dorsalis Pedis Artery.—An incision an inch long is to be made on the back of the foot, between the inner tendon of the extensor brevis digitorum and the outer side of the tendon of the extensor longus pollicis. (These tendons can be mapped out by manipulating the great toe.) After dividing the skin, the superficial fascia, and the deep fascia, the artery will be exposed. The continuation of the anterior tibial nerve lies to the fibular side of the artery. The ligature should be passed from the fibular toward the tibial side.

NOTE.—It is important in ligating arteries to make all the incisions carefully; to divide all deep structures on a director; to pass the ligature first between the artery and any important vein close to it, so as afterward to pass away from the dangerous neighborhood; to be sure not to tie a vein, or a nerve, or anything else for an artery. Opinions differ as to the best material for ligatures. Good carbolized catgut, if well applied, is the best material. But, as it is not always easy to get catgut which can be relied upon, nor can everybody apply it just as it should be applied, the material most generally applicable is unquestionably stout silk or linen thread. This should be well soaked in a solution of carbolic acid or of corrosive sublimate before being used. The knots should be made firm. In the case of catgut the ends should be cut off short and the whole wound closed, so as to secure immediate union. When silk or linen thread is used, it is usually best to cut one end off short and to leave the other hanging out of the wound.

After ligating a main artery, the parts below it should be kept absolutely quiet and their warmth maintained by artificial means, so as to diminish the liability to gangrene.—From "THE MEDICAL NEWS VISITING LIST."

URINALYSIS.

I. CLEAR LIQUID PORTION.

Specific gravity: normal, 1015-1025. If high, and urine *dark-colored*, urea, uric acid, or blood; *light-colored*, sugar. When more than 1025—

1. If crystals given by HNO_3 = Urea.
2. If reaction from Trommer's test or fermentation = Sugar.
3. If neutral, or feebly acid, and precipitates on boiling, precipitate soluble in HNO_3 = Earthy Phosphates.
4. If last precipitate is insoluble in HNO_3 = Albumen.
5. If yielding with HCl needle-shaped crystals = Hippuric Acid.
6. If high-colored, and yields, on boiling, coagula = Blood.
7. If red color with HCl = excess of coloring matter = Urosacine.
8. If change of color with HNO_3 (iridescent) = Bile.

II. SEDIMENTARY PORTION.

1. If sed. dissolves when warmed = Urate of Ammonia.
2. If sed. not sol. in HCl = Earthy Phosphates.
3. If sed. insol. in acetic acid but sol. in HCl = Oxalate of Lime.
4. If sed. insol. in HCl becomes purplish by add. of HNO_3 and NH_4HO = Uric Acid.
5. If sed. is greenish-yellow, easily diffused by agitation = Pus.