What are "Serum Tears"?

Serum tears are eye drops made out of a patient's own blood. Serum is the somewhat clear fluid that remains after the cells and most of the proteins are removed from the blood. These drops have healing and nurturing properties beyond that of commercially available artificial tears.

What ingredients differentiate artificial tears and serum tears?

Artificial tears are mainly salt and water, with the possible addition of some other lubricants. Serum tears have several ingredients not found in artificial tears that are believed to have healing and nurturing properties that allow health cell growth: epidermal growth factor, hepatocyte growth factor, fibronectin, neurotrophic growth factor, and vitamin A. In patients with very severe dry eye, these factors are severely depleted, and thus may explain in part the difficulty in maintaining good vision and comfort as we age.

Do serum tears work for all patients?

Like many dry eye therapies, serum tears may benefit some patients more than others. If serum tears significantly improve one's dry eye symptoms, we recommend continuing them.

What is involved in attaining serum tears?

Two steps are required to make serum tears: a blood draw at a laboratory then formulating the serum tears at a compounding pharmacy. The patient has to go to the lab for a blood draw, the blood is processed, and then is sent to the compounding pharmacy for further processing. Within several days the serum tears are ready for patient pickup. Patients need to bring their insurance cards to the laboratory, as the blood draw may be covered insurance. Patients should be ready to pay out of pocket at the compounding pharmacy since insurance companies do not pay for the serum tears. Patients need to bring a cooler to the pharmacy to keep their serum tears frozen until they are ready to use.

What locations are available to make the serum tears? What do they cost?

Blood draw:

Norton Suburban Laboratory 4001 Dutchmans Lane, Louisville, KY 40207 (502)-893-1045 Patient's insurance will be billed for the phlebotomy and processing the blood.

Compound Care Pharmacy:

12121 Shelbyville Road, #107, Louisville, KY 40243 (502)-244-6500' \$250-350 for a 2-3 month supply depending on amount able to be made from sample

How do I use serum tears?

Just like artificial tears, use serum tears as often as every hour or two to relieve dry eye symptoms. Serum tears are dispensed in many small vials. Each vial must be disposed of 48 hours after it is opened. Once opened, the vial must be kept refrigerated between dosing. All vials must be kept frozen until the day they are to be opened.