

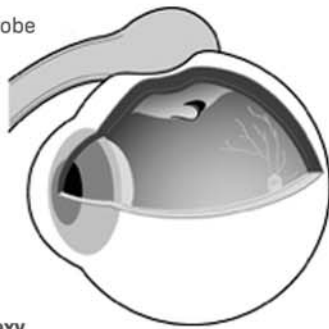
**Most technologically  
advanced cryosurgical device**

## **Cryo-S Electric II**

**Ophthalmology ▪ Cryotherapy**



cryoprobe



**Cryopexy**

Special cryoprobe applied to the outside surface of the eye can generate a localized adhesion between the retina and deeper eye wall layers. This "spot welding" is very strong and often completely eliminates the problematic retinal hole or tear.



**Pterygia (before and after cryotherapy)**



**Trihiasis (before and after cryotherapy)**

**Application in ophthalmology**

- Retinal cryopexy continues to be used as a means of repairing retinal breaks (holes or tears), which have long been recognized to be the cause of most retinal detachments. Application of cold to the choroid and retinal pigment epithelium yields cell death and subsequent scarring, resulting in sealing of the edges of retinal breaks.
- Cyclocryopexy for advanced glaucoma – In severe intractable glaucoma that is not amenable to conventional glaucoma medication or surgery, ocular cryopexy applied to the ciliary body through a transscleral application can reduce aqueous production, thereby lowering intraocular pressure. Peripheral retinal cryoablation for neovascular glaucoma – Destruction of the peripheral retina by means of cryotherapy can cause iris neovascularization to recede in neovascular glaucoma.
- Retinal cryoablation for retinopathy of prematurity (ROP) – In multicenter prospective clinical trials, destruction of the peripheral retina in premature infants with ROP slows disease progression and improves the chance of maintenance of vision; ocular cryotherapy has markedly altered the prognosis of ROP.
- Retinal cryoablation for peripheral uveitis (intermediate uveitis or pars planitis) – Destruction of the far peripheral retina can reduce peripheral uveitis and cause improvement in macular edema secondary to peripheral uveitis.
- Transconjunctival cryotherapy for retinal toxoplasmosis – Active toxoplasmic lesions in the peripheral retina can be treated with transconjunctival cryotherapy; *Toxoplasma gondii* organisms are destroyed by extreme cold.
- Retinal cryoablation for Coats disease – This most likely basis for this use is a decrease in production of vascular endothelial growth factor (VEGF) by the peripheral retina and a subsequent decrease in vascular proliferation.
- Peripheral retinal cryoablation to induce regression of proliferative diabetic retinopathy – Although this approach has been used successfully, it has largely been supplanted by panretinal photocoagulation with an argon laser, which has greater efficacy.
- Transconjunctival cryopexy for larva migrans of the eye – The intraocular nematode in this condition (*Toxocara canis* or *Toxocara cati*) can be destroyed by transconjunctival cryopexy if it is located away from the posterior retina.
- Peripheral cryoablation of the retina and choroid for retinal vasculitis of various etiologies.
- Cryoablation of malignant peripheral melanomas of the choroid or ciliary body – This allows salvage of vision and the eye in selected cases.
- Cryoablation of retinoblastomas – Peripheral retinoblastomas can be successfully treated with transconjunctival or transscleral cryopexy.
- Cryoablation of metastatic lesions to the choroid. These secondary malignancies (most commonly from the breast or lung) can be destroyed with cryosurgery if their location is peripheral enough.
- Cryosurgery for conjunctival neoplasias of the epithelium – This can be considered as an alternative to surgical excision.
- Cryotherapy for malignancies of the lids (eg, basal cell carcinomas).
- Freezing of lash roots for recurrent trichiasis.



## Cryo-S Electric II

Cryo-S Electric II is state-of-the-art cryosurgical device manufactured by Metrum CyoFlex. It is the next generation of device used in field of surgery since 1992.

Cryo-S Electric II is operated with user friendly touch screen interface and controlled by microprocessor giving current information regarding procedure parameters on LCD screen



CE 2274

## Advantages of Cryo-S Electric II

- Mode selection, cleaning the probe and freezing can be performed automatically using foot switch or touch screen keeping the site of a procedure under sterile conditions.
- Electronic communication (chip system) between the main device and connected cryoprobe. Unit recognizes probe characteristics.
- Pressure and gas flow are set automatically, any manual adjustment is not necessary.

## Cryoprobes

Owing to special shapes of the contact cryoprobes, full scope of freezing in ophthalmology.



we are inspired by your expectations

ISO  
EN ISO 13485:2012



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