INTRODUCTION

Ultrasound Biomicroscopy (UBM) is a new imaging technique that use high frequency ultrasound to produce images of the eye at near microscopic resolution. The technique was developed in Toronto Canada on the Basic research conducted in the labs of F.Stuart Foster ***(Pavlin et al., 1998)***.

UBM's importance lies in the ability to produce cross sections in the living eye at the level of anterior segment of the eye at microscopic resolution without violating the integrity of the globe. UBM although lacking the resolution of optical microscopy, gives us images in living eye without affecting the internal relationships of the structures imaged ***(Pavlin and Foster, 1995)***.

UBM is a powerful tool for obtaining precise images and measurement of anterior chamber depth, trabecular-iris angle, angle opening distances at 250 and 500 microns from the scleral spur. ***(Kobayashi et al., 1999)***.

Structures surrounding the posterior chamber including the ciliary body, iridolenticular relationship and zonular apparatus of Zinn were previously hidden from clinical observation but now they can be imaged by the UBM and their normal anatomical relationships can be assessed. Also, the development of pathologic changes involving the anterior segment architecture can be quantitatively and qualitatively evaluated ***(Tello et al., 2000)***.

UBM was used to examine the aqueous drainage route beneath the scleral flap. The thickness of the aqueous drainage route beneath the center of the scleral flap was found to be correlated with the development of a filtering bleb. The size of the bleb was correlated with the intraocular pressure, which had not been treated with antiglaucoma medication. Thus, preservation of the aqueous drainage route beneath the scleral flap probably influenced the development of a filtering bleb following trabeculectomy ***(Jinza et al., 2000)***.