



## البحث الثاني (براءة الاختراع)

### Patent [No: 27946]: Pressure controlled Rectal Balloon.

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**براءة إختراع رقم (27946): البالونة الشرجية ذات الضغط المتحكم**

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April, No 788, p 44 (363). **جريدة براءات الإختراع: مكتب براءات الإختراع,**

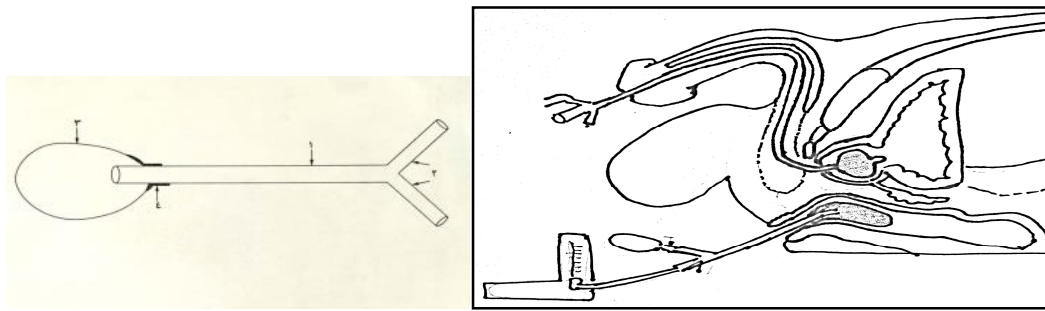
مكتب براءات الإختراع. أكاديمية البحث العلمي و التكنولوجيا. وزارة التعليم العالي و البحث العلمي. حماية لمدة عشرون عام.

**Pressure controlled Rectal Balloon:** It is a rubber tube, one of its ends ending in a rubber balloon while the other ends with two channels. One attached to the pump of sphygmomanometer while the other attached the mercury storage of sphygmomanometer. This allows the air to inflate the balloon and measuring the pressure inside it during inflation when we position it in the rectum opposite to the prostate.

There is no equivalent to this invention before that in urology. Currently, the urinary catheter (foley) has a balloon attached to it. When the balloon is filled with air, the pressure inside it cannot be measured, and this generates unmeasured pressure on the rectal tissues, which may lead to fibrosis of the rectal tissues

This rectal balloon used during prostatectomy either open surgery or Trans urethral resection. We placed it in rectum through anus opposite to the prostate then we inflate the balloon by air till pressure over the diastolic pressure of the patients and bellow the diastolic one. This pressure applied on the prostate blood supply allowing better hemostasis from the site of surgery, this lead to less blood loss during surgery without any damage or complication for the rectal or prostate tissue.

This leads to less saline used for irrigation than the usual leading to shorter urethral catheter duration and shorter hospital stay.



An illustration of the **Pressure controlled Rectal Balloon** and the other showing its place during its use in the operation