



Fluorescence for Gynecologic Surgeries

The GreenEgg^m is used for manipulation and visualization during minimally invasive gynecologic, urologic and colorectal surgeries. The GreenEgg^m is used as a traditional manipulator, preserving the surgical flow.

The GreenEgg™ fluoresces under near infrared light commonly used in robotic and laparoscopic surgical systems. By trans-illuminating tissue, the GreenEgg™ provides surgeons with enhanced images. Trans-illumination highlights tissue depth, tissue quality and subsurface pathology. This allows surgeons to make more informed real-time surgical decisions.



Figure 1: Bladder dissection in full spectrum light.



Figure 2:
Bladder dissection
with NIR overlay.
The GreenEgg™ is
fluorescing in the
vagina.

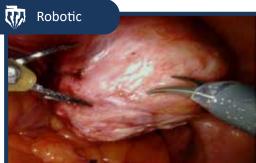


Figure 1: Scarred bladder in full spectrum light.

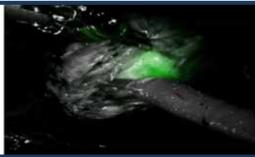


Figure 2:
Transillumination
from the
GreenEgg™
provides enhanced
border definition.



Figure 1: Normal appearing bladder anatomy in full spectrum light.

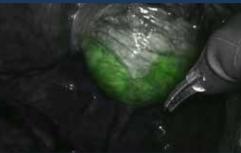


Figure 2:
Transillumination
with the
GreenEggTM
revealed bladder
scarring in a "V"
shaped formation.



Figure 1: The GreenEgg™ manipulator is placed in the rectum.

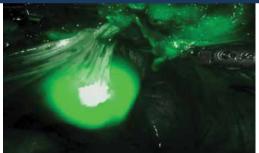


Figure 2:
The GreenEgg™
manipulator
fluoresces in the
rectum for
enhanced teaching
moments.



In gynecologic surgeries, the GreenEgg[™] aids the surgeon by trans-illuminating the rectum and vagina. This can be beneficial with the identification of subsurface pathology, assisting in the visual identification of scar tissue and evaluating relative tissue depth during minimally invasive surgeries.

Procedure	Benefits of Transillumination	Impact
Endometriosis Resection	Enhanced visualization of subsurface endometriosis by trans-illuminating the tissue.	 Superior identification and removal of endometriosis without the use of a proctoscope. Decreased operative time and sterilization costs.
Resection of Recurrent Gynecologic Cancers	Placing the manipulator in the rectum or the vagina will transilluminate the tissue and amplify areas of concern for recurrence or seeding.	 More complete resection of recurrent cancer will result in improved prognosis. Can be used in conjunction with ICG identifying sentinel lymph nodes.
Complicated Pelvic Anatomy	By transilluminating the rectum or vagina, anatomic borders are delineated and surgical planes are enhanced leading to a decrease in perforation of the bladder, rectum or vagina.	By decreasing intra operative complications, patient outcomes are improved, and surgical time is minimized.
Sacrocolpopexy	By placing the manipulator in the vagina and transilluminating the tissue, surgical planes are enhanced and mesh placement is facilitated. Incidental entry into the bladder, rectum or vagina is illuminated.	 Surgical time is minimized with improved visualization. Decreased mesh related complications by avoiding and recognizing incidental cystotomies or vaginal/rectal perforations.
Minimally Invasive Pelvic Surgeries	Enhance visualization through transillumation leads to better communication within the surgical team.	Excellent for surgical learners with potential to decrease learning curves.

The GreenEgg[™] provides hassle free fluorescence with the following features:



Trans-Illumination

The GreenEgg™ fluorescence is used to transilluminate tissue, revealing sub-surface pathology, anatomical borders, tissue thickness and more.



Injection Compatible Fluorescence

The GreenEgg™ provides fluorescence by itself or in conjunction with intravenous ICG and other systemic dyes.



Fluorescence Without Time Limits

The GreenEgg[™] provides fluorescence for the entire the surgery without time restrictions. (Injected ICG is only effective within a short time window before it saturates the image).



Individually Sterilized

The GreenEgg™ is individually packaged and sterilized, making the GreenEgg™ available with maximum repeatable fluorescence every time.



Injection Free Embedded Fluorescence

The GreenEgg $^{\text{\tiny{M}}}$ provides localized fluorescence without the need to mix or inject ICG.



Power Free Fluorescence

Without power cords or batteries, the GreenEgg™ fluoresces when energized by NIR surgical imaging systems.



