Glow Bright

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Technology description

Small, fluorescent surgical disposables (i.e. needles, sutures, and trocars) have been invented by UT Health SA that fluoresce to aid in visualization of the item. This functionality can be used in the event that the items are lost or unaccounted for during or after a surgical procedure.
Background:
Losing an instrument during surgery is a rare but potentially serious event that can cause prolonged operative time and patient harm. It is common practice for surgical teams to perform equipment counts before and after a procedure to account for all items. Equipment can be dropped, misplaced in the surgical theater, or left retained within a patient. Solutions exist to reduce this risk, such as routine surgical counts, visual searches, use of magnetic retrievers, barcodes, RFID’ s, and radiography. However, none of these solutions offer a fast and simple way to find the misplaced item or prevent loss of the item in the first place. Additionally, these solutions may not be applicable to those surgical fields that use extremely small tools (e.g. ophthalmology, neurology). The sutures in these applications can be as small as a human hair.

Application area

This invention is applicable to all surgical fields but would have particular application in those specialities that use extremely small instruments, such as ophthalmology and neurology. It would provide the following improvements to the current standard:
Decrease the incidence of lost surgical items
Decrease time spent looking for items by OR staff
Prevent surgical items retained in the patient
Minimize the amount of time the patient spends sedated
Prevent unnecessary radiography procedures, thus reducing cost and x-ray exposure

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