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Abstract Title:	**Evaluation Of A Disposable Bronchoscope For Diagnositc And Therapeautic Bronchoscopy In A Burn Intensive Care Unit**
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Objective:	Discuss disposable bronchoscope an effective alternative to the reusable bronchoscope.
Abstract:	**Introduction/Background:** More outbreaks have been linked to inadequately disinfected semi-critical medical devices as compared to any other reusable item. Bronchoscopes are frequently utilized in the burn intensive care unit for diagnostic and therapeutic purposes but require high level of disinfection as opposed to heat sterilization due to intricacies of their design. In this study, we investigate the feasibility of replacing reusable bronchoscopes with disposable bronchoscopes. **Methods:** Prior to introduction of the disposable bronchoscope, we provided an orientation to physicians, nurses and respiratory therapists. Bronchoscopies were performed when clinically indicated on patients with inhalation injuries to remove soot and debris from the airways. When infection was suspected, bronchoscopy with bronchoalveolar lavage was performed with collection of cultures.The Ambu aScope™3 system consists of the disposable bronchoscope and the Ambu aView Monitor™. The disposable bronchoscope has a working channel, a control lever, a suction button and a handle, like the reusable bronchoscope. The distal end contains the camera, the light source, and the working channel exit. The Ambu aView™ monitor displays the video image, and allows for snapshots. There are three different sizes--comparable to reusable scope. The video monitor itself was shared between patients and disinfected after each procedure. The diagnostic bronchoscope is self-calibrating which eliminates the need to perform a calibration prior to the procedure—a process which is a required with the reusable bronchoscope. **Results:** See Charts **Conclusions:** Disposable bronchoscopes for bronchoscopy for inhalation injury patients is a viable alternative to reusable bronchoscopes. Replacing reusable bronchoscopes with disposable bronchoscopes leads to healthcare savings secondary to sunk costs per device, costs of repair and disinfection, and efficiency of time. The preliminary data from users

	shows that the application of disposable bronchoscopes during the procedure itself parallels reusable bronchoscopes. The cost-savings substantiated by its ease of use make the disposable bronchoscope an effective alternative to the reusable bronchoscope in the burn intensive care unit.

Data Collection/Results

	Reusable	Disposable
Initial Capital Costs	-Cost of new bronchoscope: $32,000 -Cost of cart, light source & processor: $78,000 Total capital outlay: $110,000	-Cost of reusable monitor: $2995 Total capital outlay: $2995
Cost of Repairs	-Per bronchoscope: $8,000 - $10,000 -Cost/yr to repair all scopes: $135,000 - $173,000 -Avg # of times that scopes are sent out repairs/yr: 16-18 times for	-No costs for repair/ bronchoscope
Costs per Procedure	Assuming 1 hr/procedure and 1 hr to perform HLD of the bronchoscope (based on 275 procedures/yr in the BICU) -Respiratory Therapist salary: $28.00/hr -Equipment Technician salary: $14.00/hr -Supply costs for procedure and sterilization: $152.00/procedure -Depreciation of capital equipment over 10 yrs: $40.00/procedure -Repair costs spread: $136.00/procedure Total Cost/procedure: $370.00	Assuming 30 min of Respiratory Therapist time: -Respiratory Therapist time: $14.00 -Supply costs: $26.00 -Cost of bronchoscope: $189.00 Total Cost/procedure: $229.00