**Materials List for** 

## **Endoscopic Balloon Dilatation of the Eustachian Tube via the Soft Palate Approach in Miniature Pigs**

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URL: https://www.jove.com/video/66609

DOI: doi:10.3791/66609

## **Materials**

| Name                        | Company   | Catalog Number                           | Comments   |
|-----------------------------|---|--|--|
| Amoxicillin Soluble Powder  | Hefei dragon god Animal<br>Pharmaceutical Co., Ltd. | Veterinary Drug License No.<br>120.51199 | Amoxicillin Soluble Powder is an antibiotic used in veterinary medicine. It is effective against a wide range of bacterial infections in animals, especially respiratory and gastrointestinal infections.  Easily dissolved in water, it is convenient for oral administration to livestock and poultry. To prevent postoperative infections following Eustachian tube balloon dilation surgery. |
| Anesthesia Circuit          | INSPIRED MEDICAL                                    | YZB/Guangdong 0016-2009                  | The anesthesia circuit is a system of tubes and components in an anesthesia machine, which delivers anesthetic gases to the patient and removes exhaled gases. It ensures a continuous flow of gases, allowing precise control of anesthesia levels during surgical procedures.  |
| Anesthesia Machine          | Dräger  | ARHB-0015                                | An anesthesia machine is a medical device used to administer and maintain anesthesia during surgical procedures. It precisely mixes gases and vapors, delivering a controlled flow of anesthesia to the patient while monitoring vital signs to ensure safety  |
| Balloon Dilatation Catheter | BIOVAS  | ETB30200                                 | An Eustachian tube balloon dilatation catheter is a specialized medical device designed to treat Eustachian tube dysfunction. It features a small balloon at its tip, which, when inflated, gently opens and widens the Eustachian tube, aiding in restoring normal function and relieving symptoms.   |
| Balloon Pusher              | BIOVAS  | DYQ42                                    | Used in conjunction with a balloon dilation catheter, this device is employed during Eustachian tube balloon dilation surgery.   |

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|   |   |   | It is inserted through the nasal cavity to the opening of the Eustachian tube, establishing a working channel. This guides the balloon catheter into the canal to complete the balloon dilation. After the procedure, it is removed from the canal along with the balloon dilation catheter. In this experiment, it is inserted through the soft palate to the opening of the Eustachian tube."  |
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| Cefuroxime Sodium for Injection               | SHANDONG RUNZE<br>PHARMACEUTICAL CO., LTD | National Medicine Approval<br>Number H20066112  | Cefuroxime sodium for injection is a broad-spectrum antibiotic used to treat various bacterial infections. It's effective against respiratory, urinary, skin, and soft tissue infections, working by interfering with bacterial cell wall synthesis, thereby eliminating the infection-causing bacteria. To prevent postoperative infections following Eustachian tube balloon dilation surgery. |
| Disposable Balloon Inflation<br>Pressure Pump | FERVID                                    | FXB-20-30                                       | In Eustachian tube balloon dilation surgery, a single-use balloon inflation pressure pump is employed. This device precisely controls the balloon's expansion, ensuring safe and optimal pressure during the procedure. It's crucial for achieving effective dilation while minimizing the risk of tissue damage.  |
| Endoscope                                     | Karl Storz                                | 7220AA  | In Eustachian tube balloon dilation surgery, an endoscope is used for direct visualization of the Eustachian tube. This allows for precise guidance of the balloon catheter, ensuring accurate placement and dilation, crucial for the success of the procedure and reducing the risk of complications. Used in conjunction with an endoscopic imaging system.                                   |
| Endoscopic Imaging System                     | DELON                                     | HD3808  | In Eustachian tube balloon dilation surgery, an endoscopic imaging system provides high-resolution visuals of the nasal and Eustachian tube areas. This facilitates precise balloon placement and expansion, ensuring the procedure's effectiveness while minimizing the risk of tissue damage and complications.  |
| Epinephrine Hydrochloride<br>Injection        | HENGTONG                                  | Veterinary Drug License No. (2013)<br>220381220 | Epinephrine hydrochloride injection is widely used for its vasoconstrictive properties, effectively constricting blood vessels to reduce bleeding. This makes it a crucial agent in controlling hemorrhage, particularly during surgical procedures and in certain bleeding disorders.   |

| Tiletamine Hydrochloride and Zolazepam Hydrochloride Injection | Virbac  | Zoletil 50                                 | Tilidine hydrochloride and naloxone hydrochloride injection is a medication combining an opioid analgesic and an opioid antagonist. It's used for severe pain management, where tilidine provides pain relief while naloxone reduces the risk of opioid-induced side effects, particularly respiratory depression. Used for the anesthesia of experimental animals. |
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| Trauma Continuous Drainage<br>Suction Device                   | Shanghai S.MANF   | YZB/Shanghai 5094-54-2014                  | Trauma continuous drainage aspirator is a medical device used for prolonged suction of fluids from surgical or traumatic wounds. It helps to remove exudate and blood, reducing infection risk and promoting faster healing by maintaining a clean and dry wound environment.   |
| Xylazine Hydrochloride Injection                               | Chang shabest biological technology institute CO., LTD. | Veterinary Drug License<br>Number180121777 | Cetirizine hydrochloride injection is used in experimental animal anesthesia for its sedative properties. It aids in the induction of mild sedation, reducing stress and discomfort in animals during procedures. Its application is crucial in ensuring the welfare and minimizing distress in various animal studies.   |