I. Definition:

Videostroboscopy is the use of a rigid or flexible fiberoptic camera with strobe light, placed into the oropharynx or naris of an awake patient, in order to examine the anatomy, mobility, and vibratory characteristics of the larynx. This type of endoscopy can provide diagnostic data and guide therapeutic intervention. This procedure can be performed with or without topical or local anesthetic.

II. Background Information

A. Setting: The setting (inpatient vs endoscopy suite vs outpatient) and population (adults vs pediatrics) for the Advanced Health Practitioner (AHP) is determined by the approval of the privileges requested on the AHP Privilege Request Form. If a Pediatric procedure is being done, Child Life Services are involved, age-appropriate language is used, and age-appropriate developmental needs are met, as appropriate to the situation.

B. Supervision:

The necessity of the procedure will be determined by the AHP in verbal collaboration with the attending physician or his/her designee. Direct supervision will not be necessary once competency is determined, as provided for in this procedure. At that time, general or indirect supervision is acceptable.

Designee is defined as another attending physician who works directly with the supervising physician and is authorized to supervise the AHP.

The Advanced Health Practitioner will notify the physician immediately upon being involved in any emergency or resuscitative events or under the following circumstances:

- 1. Patient decompensation or intolerance to the procedure
- 2. Bleeding that is not resolved
- 3. Outcome of the procedure other than expected

C. Indications:

Videostroboscopy is indicated in patients with laryngeal injury, dysphonia, stridor, or other signs of laryngeal airway abnormalities.

D. Precautions:

Videostroboscopy is a complicated procedure performed in an awake patient that requires thorough knowledge of oral, oropharyngeal, and laryngeal anatomy. Contraindications to these procedures include severe cardiopulmonary compromise or suspected infectious epiglottis.

III. Materials

- 1. Videostroboscopic unit (rigid or flexible endoscope with camera and microphone)
- 2. Video tower and strobe light source
- 3. Gauze
- 4. Vasoconstrictive spray (if needed)
- 5. Topical anesthetic spray (if needed)

IV. Procedure

A. Pre-treatment evaluation:

Patient history is obtained and a preliminary upper airway physical exam is performed, including visualization of the oropharynx and neck.

B. Set up:

Procedure is performed with patient in an upright, seated position.

C. Patient preparation

- 1. Informed consent is obtained from patient or legal guardian / parent.
- 2. Patient is identified with two approved patient identifiers prior to start of procedure.
- 3. Antibiotics are generally not required.
- 4. Patients are often given a mist of a topical intranasal vasoconstrictor (eg: Neosynephrine), followed by intranasal mist of topical anesthetic (eg: 2% Ponticaine)

D. Perform the procedure

- 1. Ensure that all pre-procedure steps are taken prior to the procedure.
- 2. For rigid stroboscopy: the patient is instructed to open mouth and to allow examiner to hold patient's tongue in protruded position, using gloved hands and gauze. Stroboscope is inserted gently into mouth and passed to oropharynx.
- 3. For flexible stroboscopy: the patient is instructed to breathe through the mouth while the stroboscope is placed into the nostril and actively directed to allow maximal airway inspection.
- 4. Patient is actively directed in positioning to allow maximal laryngeal inspection, including observation of patient vocalizations.
- 5. The stroboscope is gently withdrawn from either the nose, or the oropharynx and oral cavity, to conclude the procedure.

E. Post-procedure

No post-procedure monitoring is required.

F. Follow-up treatment

No routine post-procedure diagnostic testing is required.

V. Documentation

A. Documentation is in the electronic medical record

- 1. Documentation of the pretreatment evaluation
- 2. Record the time out, indications, procedure, outcome, patient tolerance, medications given, additional interventions during procedure, and the plan in the note, as well as any self-care or discharge instructions.
- **B.** All unexpected findings are reviewed with the supervising physician

VI. Competency Assessment

A. Initial Competence

- 1. The Advanced Health Practitioner will be instructed on the efficacy and the indications of this procedure and demonstrate understanding of such.
- 2. The Advanced Health Practitioner will demonstrate knowledge of the following:
 - a. Medical indication and contraindications of videostroboscopy.
 - b. Risks and benefits of the procedure
 - c. Related anatomy and physiology
 - d. Consent process (if applicable)
 - e. Steps in performing the procedure
 - f. Documentation of the procedure
 - g. Ability to interpret results and implications in management.
- 3. Advanced Health Practitioner will observe the supervising physician perform each procedure **three** times and perform the procedure **three** times under supervision.
- 4. Supervising physician will document Advanced Health Practitioner's competency prior to performing procedure without supervision.
- 5. The Advanced Health Practitioner will ensure the completion of competency sign off documents and provide a copy for filing in their personnel file and a copy to the medical staff office for their credentialing file.

B. Continued proficiency

1. The Advanced Health Practitioner will demonstrate competence by successful completion of the initial competency.

- 2. Each candidate will be initially proctored and signed off by an attending physician. Advanced Health Practitioner must perform this procedure at least three times per year. In cases where this minimum is not met, the attending must again sign off the procedure for the Advanced Health Practitioner. The Advanced Health Practitioner will be signed off after demonstrating 100% accuracy in completing the procedure.
- 3. Demonstration of continued proficiency shall be monitored through the annual evaluation.
- 4. A clinical practice outcomes log is to be submitted with each renewal of credentials. It will include the number of procedures performed per year and any adverse outcomes. If an adverse outcome occurred, a copy of the procedure note will be submitted.

VII. RESPONSIBILITY

Questions about this procedure should be directed to the Chief Nursing and Patient Care Services Officer at 353-4380.

VII. HISTORY OF PROCEDURE

Revised May 2017 by Subcommittee of the Committee for Interdisciplinary Practice Reviewed May 2017 by the Committee on Interdisciplinary Practice Approved May 2017 by the Executive Medical Board and the Governance Advisory Council.

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