

Dr. Jake Johnson:

Hello, welcome to the On-call Consults in <10 Minutes series on ENT in a nutshell, a compliment to Head Mirrors Online Survival Guide. I'm your host, Jake Johnson. And today we are joined by Dr. Garret Choby, board certified rhinologist and skull-base surgeon. In this episode we'll cover nasal foreign bodies. If you'd like more information on nasal foreign bodies and other foreign bodies, there are other podcasts in this same nature, as well as full online documents on headmirror.com.

Let's jump right into nasal foreign bodies. Young children and patients with developmental delay are the most common patients to present with nasal foreign bodies, though occasionally you'll see adults with insects, accidental placements or other objects such as the backing to a nose stud. Timely diagnosis and treatment is imperative to prevent infection in the morbidity. When considering these sorts of patients, what do you think about as far as the differential diagnosis and Can't Miss Diagnoses, Dr. Choby?

Dr. Garret Choby:

So to begin with in the majority of these cases, it's a pretty obvious diagnosis because a child or a patient has a foreign body in their nose. However, if the patient has had a foreign body for a long period of time, and it's very infected or granulation tissue is developed, other things should be ruled out, like sinonasal tumor or nasal crusting from a granulomatous or autoimmune disease. But the biggest Can't Miss Diagnosis for this one is a placement of an intra-nasal button battery. These can have devastating consequences to the nose, eyes, they can the esophagus as well. So a button battery placement would certainly be a Can't Miss Diagnosis.

Dr. Jake Johnson:

What things put patients at risk for a nasal foreign body?

Dr. Garret Choby:

Typically, these are young pediatric patients for the most part. If a patient has a mental disability they may also be more likely to play something in their nose. And lastly, there are many patients who have a nasal jewelry. They may wear a nasal stud and they may be at increased risk due to other jewelry.

Dr. Jake Johnson:

As far as history taking, what sort of things do you want to ask these patients?

Dr. Garret Choby:

It's helpful to know if this is a witnessed or an unwitnessed placement of the foreign body, and if they know what type of object was actually placed. It's also helpful to know how long it's been there, if at all possible. Have they had symptoms for three or four weeks or was this witnessed and just placed yesterday? It's also important to get some idea of symptoms of pain, of nasal drainage or other nasal symptoms, which may tip you off into the chronicity of this placement.

Dr. Jake Johnson:

And what sort of things do you want to bring with you to evaluate this patient?

Dr. Garret Choby:

Certainly, I think equipment for a thorough nasal examination is important. This may include a nasal speculum and a zero degree rigid endoscope, as well as oxymetazoline or nasal decongestant and potentially nasal lidocaine, as well. It's also helpful to have some tools for possible extraction. These can include alligator cups forceps, a loop curette, or a right angle instrument as typically used in the ear canal. Lastly, there is some pre-made things that can be used on occasion. The most common one you may see in the emergency department is a nasal balloon extractor, which is a catheter, with a balloon on the back end of it, which you can insert past a foreign object and then pull it forward with.

Dr. Jake Johnson:

And in going to see this patient, what sort of items do you want look at and what things are you thinking about as far as your physical examination?

Dr. Garret Choby:

A thorough head and neck exam is always important. You want to make sure their oral cavity exam is normal, that there hasn't been an extension of a infection or disease process through the palate or those kinds of things, although that'd be quite unusual. The goal is really to get a good nasal exam, clean any surrounding debris, and visualize the foreign object, if at all possible. It's also very important to check the contralateral nostril. Where there's one foreign body, there may be two, so certainly ruling that out is important, and looking for any other concerns of injury, such as injury to the nasal septum or perforation is also important.

Dr. Jake Johnson:

And in these patients, do you generally get a diagnostic workup of any kind?

Dr. Garret Choby:

In the majority of patients a diagnostic workup is not necessary. If you're worried about a tumor, or it's been a high impact mechanism of injury, like an explosion or something like that, you may consider a CT scan, however, it's generally not indicated.

Dr. Jake Johnson:

And as far as treatment of these patients, what sort of things do you consider and what's your general plan with trying to get after these nasal foreign objects?

Dr. Garret Choby:

A lot of this depends on the age and the behavior of the patient. If they're a young child, they can be held down very easily. You may be able to get a nice exam with the rigid endoscope and be able to remove it quite easily at the bedside simply by having someone hold the patient. If it's an older child or more difficult to remove, conscious sedation may be necessary for some of these patients. Or if it's an adult patient with mental disability, they may need conscious station or even a trip to the operating room.

I think that using a rigid endoscope is helpful in the majority of cases and the plan for what tool to remove it really depends on what kind of object it is. If it's a small, smooth object, usually getting behind it with a right angle hook or an ear curette is very helpful. However, if it's a thin object or has a nice ability to grasp it, then a alligator forceps may be very helpful. Lastly, if it is a live insect in the nasal cavity, these can be challenging to remove from time to time. It may be helpful to sort of flood the area

a bit with a little bit of Lidocaine, which helps to calm it down or even kill it, and then remove it afterwards, once the nasal cavity is anesthetized.

Dr. Jake Johnson:

After you've completed this, do you consider any medications after that for these patients?

Dr. Garret Choby:

If the patient has a lot of edema from the foreign body being in there, you may consider some nasal saline or even a topical steroid spray. If it is a more significant chemical injury, such as a battery or some sort of detergent or solvent, they may benefit from routine nasal rinses, or even in rare cases, systemic steroids.

Dr. Jake Johnson:

We sort of mentioned this as far as the approach to getting the nasal foreign bodies out of the nose, but are there any considerations when you think about going to the operating room or conscious sedation for the patient?

Dr. Garret Choby:

Sure. I think it's important to get a history as far as what the NPO status of the patient is for both consideration of conscious sedation or a trip to the operating room. And again, a lot of that decision will be made based on the disposition of the patient and their age and their ability to be sort of held still by either their parent or someone who's helping you in the emergency room. I'll also mention there is a risk of aspiration with nasal foreign bodies. So being sure they're going to be able to be calm and still enough for you to be able to get it out without pushing it back into the nasopharynx is also very important.

Dr. Jake Johnson:

And after you've completed this, generally, do you have follow-up for these patients or where do they go from here?

Dr. Garret Choby:

For the majority, this is a quick outpatient procedure. If there's significant edema or trauma, you may want to see them back for followup for a quick nasal examination. If however, it's a routine removal and the nasal mucosa looks fairly healthy, maybe no follow up or just a routine visit with their pediatrician.

Dr. Jake Johnson:

Thank you for that quick overview on nasal foreign bodies, Dr. Choby. We appreciate your time today.

Dr. Garret Choby:

Absolutely. Thanks for having me.