

## A Rare Case Report: Oropharyngeal Foreign Body in an Alzheimer Patient

İ Ayşegül Şule ALTINDAL<sup>a</sup>

<sup>a</sup>Clinic of Otolaryngology,  
Kütahya Tavşanlı State Hospital,  
Kütahya, TURKEY

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Correspondence:  
Ayşegül Şule ALTINDAL  
Kütahya Tavşanlı State Hospital,  
Clinic of Otolaryngology,  
Kütahya, TURKEY  
suleazbay@hotmail.com

**ABSTRACT** Foreign bodies in the upper airways and pharynx are one of the most challenging otolaryngology emergencies. Foreign body aspiration is usually a serious condition that is most common among the pediatric age group, and rare in adults. Most patients have an underlying disease, such as mental retardation, abnormal swallowing reflex, or neurological problems. In adults, especially have Alzheimer, aspiration may be tolerated for a long time. We report an unusual case of 80 year old woman with Alzheimer disease with only minimal dysphagia caused by oropharyngeal wet wipes. In a neuropsychiatric patient who complains of dysphagia, the presence of a foreign body in the aero digestive tract should be suspected.

**Keywords:** Foreign body; oropharynx; alzheimer

Foreign bodies in the upper airways and pharynx are one of the most challenging otolaryngology emergencies. Foreign body aspiration is usually a serious condition that is most common among the pediatric age group, and rare in adults.<sup>1,2</sup> The etiology of foreign body aspiration is often peanuts, which may be radiopaque on X-ray.<sup>3</sup> Fish bone is the most common foreign body (FB) encountered in the pharynx.<sup>4,7</sup> Most Pharyngeal foreign bodies (PFBs) are removed in the outpatient department. Only a few patient may have lack of cooperation and need extracting FBs in the hospital under general anesthesia. In clinical practice, many PFBs in patients are dislodged spontaneously before presentation. However, many reports have been associated with complications of PFBs, such as infections of the pharyngeal wall, retropharyngeal abscess, migration of FB, and even death.<sup>8-11</sup> The majority of patients present with acute symptoms, like cough, dyspnea and hemoptysis, while others present with chronic symptoms.<sup>2-12</sup> Most patients have an underlying disease, such as mental retardation, abnormal swallowing reflex, or neurological problems.<sup>13</sup> In some adult patients, especially when Alzheimer disease is present, aspiration may be tolerated for a long time. Diagnosis must be established by means of symptoms, radiography, oropharyngeal examination and nasopharyngoscopy. Treatment is removal of the foreign body from the airway tract.<sup>2</sup> Oropharyngeal wet wipes are very rare causes of pharyngeal foreign bodies around the world.

We report an unusual case of 80 year old woman with Alzheimer's disease with only minimal dysphagia caused by oropharyngeal wet wipes.

## CASE REPORT

An 80-year-old woman with Alzheimer's disease was referred to our otolaryngology department with dysphagia. The relatives of the patient reported that 2 weeks ago after playing with wet wipes, she developed dysphagia. On presentation to our department, she did not complain of cough, hemoptysis, or dyspnea. According to the patient history, a first examination was performed 1 week ago by emergency department who was not able to find anything. Also cervical X-ray revealed nothing in emergency department (Figure 1). Oropharyngeal examination and nasopharyngoscopy revealed a white colour wet wipes in oropharyngeal area which extends to the supraglottis. The patient was urgently admitted to the operating room. The patient's family was contacted for consent with respect to a possible tracheostomy. Lidocaine was used in tough to prevent gag reflex and difficulty with access and visualization. Using with direct laryngoscopy, the wet wipes was grasped and removed without complication with a foreign body forceps (Figure 2). Her symptom was relieved post operatively and she was discharged same day.

## DISCUSSION

Foreign body aspiration refers to a condition in which liquid or solid objects block the respiratory tract. FBs in the oropharynx were more likely to dislodge compared with the FBs in the laryngopharynx, probably due to the powerful movement of the tongue and also due to the larger diameter of the oropharynx. Also, the risks of complications in this region are rare. It is more common in children, but rarely may occur in adults. Swallowing and cough reflexes are two important mechanisms to prevent this problem. Risk factors such as alcohol use, intubation, neuromuscular disorders, and neuropsychiatric problems (as presented case), may contribute to the foreign body aspiration.<sup>12,13</sup> There is no report in literature of wet wipes stuck in the oropharynx.



FIGURE 1: X-ray of the neck (anteroposterior views) revealed normal appearance.



FIGURE 2: Wet wipes obtained from the case.

Unlike children, presentation in adults can range from asymptomatic to pneumonia, and may be tolerated as a non-specific respiratory problem, such as chronic cough, hemoptysis, dyspnea, or fever.<sup>2-12</sup> In our case, the patient had only dysphagia.

The presence of a foreign body the aerodigestive tract should be suspected in neuropsychiatric

patients who complain of dysphagia of unknown origin with a recent history of playing with tools. The symptoms may be misdiagnosed as laryngitis, asthma, infections such as tuberculosis or even malignancies.<sup>14</sup> In our case, the patient had Alzheimer disease.

Diagnosis of foreign body aspiration is based on radiography, nasopharyngoscopy and also computed tomography (CT) scan and bronchoscopy if necessary.<sup>13</sup> The flexible laryngoscope is a safe, effective, and well-tolerated diagnostic tool for PFBs, it is worldwide accepted and recommended. However, when endoscopy results are negative and symptoms are persistent, a CT scan is suggested. CT is useful to determine the exact location of the FB and its relationship to the vital structures in the neck. It allows the surgeon to locate the FB during an exploration of the neck.<sup>8</sup> X-ray is useful in detecting bone chips and metal FBs. It should be considered when flexible laryngoscope and CT scan are not available.<sup>9</sup> In our case the patient underwent cervical X-ray and nothing was seen. And ingested oropharyngeal foreign body was diagnosed by oropharyngeal examination and nasopharyngoscopy.

In total 6-80% of radiographies have negative findings from all foreign bodies, as in our case, and only 15.7% are radiopaque. Treatment involves removal of the foreign body using direct laryngoscopy and a grasper. Chronic cases may be misdiagnosed as a tumor because of inflammation, and the surgery may be performed in these cases.<sup>2,3</sup> To avoid complications of PFBs, after FB removal, purulent secretions were drained and the wound was washed in the present case. Sometimes the abscesses may recur and cause severe upper airway obstruction, which may be life threatening if not treated promptly. Great care

should also be taken to entirely remove all parts of the foreign body.

Direct laryngoscopy is the procedure of choice to extract foreign bodies from the aerodigestive tract. Also transoral robotic surgical retrieval can be used.<sup>15</sup> Otolaryngologists should consider all of these procedures for oropharyngeal foreign body retrieval.

This is the first case report of an ingested oropharyngeal wet wipes presented by dysphagia in an Alzheimer patient. It was removed with direct laryngoscopy by a foreign body forceps using topical lidocaine anesthesia. The presence of a foreign body in the aerodigestive tract should be suspected in neuropsychiatric patients who complain of dysphagia. Oropharyngeal examination with nasofibroscope, X-ray and also CT scan make a definite diagnosis to detect a foreign body in the oropharynx. Direct laryngoscopy and transoral robotic surgical retrieval are the procedure of choice to extract it.

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#### **Conflict of Interest**

*No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.*

#### **Authorship Contributions**

*This study is entirely author's own work and no other author contribution.*

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