

# Extraintestinal Salmonellosis Unmasked in a parotid mass in the immunocompetent

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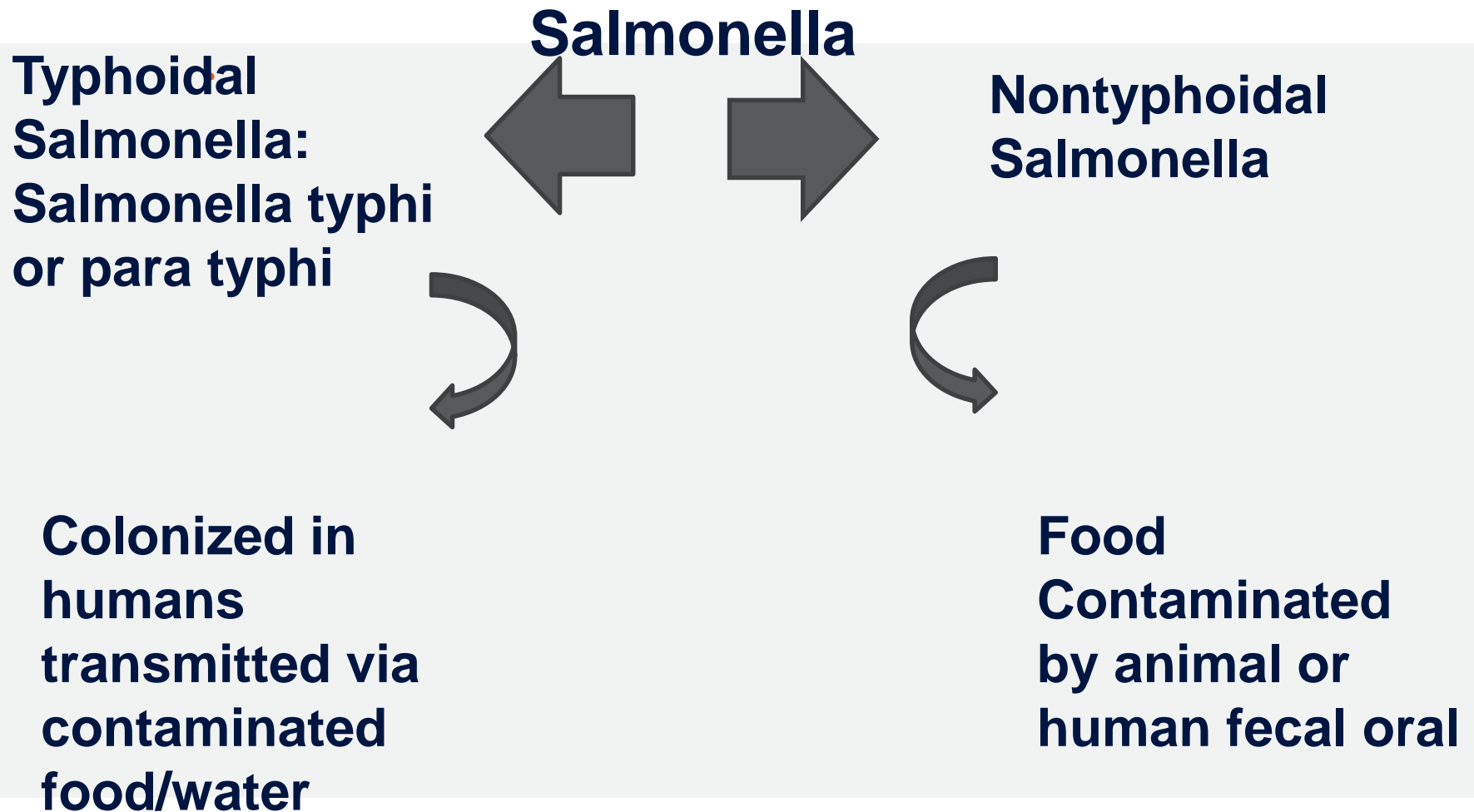
# Introduction

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# Introduction

Salmonella infection can cause a wide range of presentations, predominantly gastrointestinal but occasionally with cardiovascular or other extraintestinal manifestations. The diagnosis of extraintestinal salmonellosis requires a high degree of clinical suspicion and should be considered in patients with deep-seated abscesses. [1]. Typically, these types of infections, are extremely rare, and when revealed are typically seen in the immunocompromised patient with chronic illness, HIV, or Hepatitis. While the incidence of nontyphoid salmonellosis is estimated at over 2 million cases annually, extraintestinal manifestations account for less than 1% of cases. Studies have revealed that individuals with diabetes have risk for salmonellosis due to gastric impairments, this case serves as an example.

# Introduction



# Introduction

## Functions of the parotid gland

Parotid Gland is one of the three major salivary glands

-Watery serous saliva, rich in amylase

-Functions are Antibacterial, buffer, & taste

## How does Salmonella Invade the body?

-Lets Discuss

# Case

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# Case

- A 71-year-old male with past medical history of diabetes type 2, hypertension, presents to the ED for left facial swelling. The left infraauricular pain traveled to his upper jaw, and has been ongoing for the past 3 days. He followed up with his primary care physician, received oral antibiotics and an injection of antibiotics along with some pain medications and has been taking for 2 days without relief.
- He complains of pain and swelling in his face however he denies any fever, chills, rigors, or any gastrointestinal symptoms.



## Case

- Upon Arrival a Complete Blood Count, Vitals, and Comprehensive Metabolic panel was obtained which revealed an elevated white blood count.
- A CT scan was done of the face which revealed 2.9 x 2.8 x 3.2 cm cystic mass with peripheral rim enhancement in the superficial lobe of the left parotid gland. r/o benign malignant salivary neoplasm ,versus metastatic disease versus atypical cyst, superimposed infectious.
- A U/S guided Fine needle aspiration biopsy of the large mass was completed to rule out malignancy and found to have inflammatory cells and polymicrobial flora was growing from the cultures that were sent as a result of that.

## Case

- Patient underwent and incision and drainage twice for excessive fluid collection and swelling with ENT.
- Cultures obtained grew Extended spectrum beta lactamases Salmonella group D. With collective findings of the parotitis growing extraintestinal salmonellosis, he was placed on Fluoroquinolones for two weeks for treatment.
- From what we know of the literature, This is highly suspicious of a nontyphoidal salmonella infection manifesting extraintestinal. However there is a small percentage of literature that supports the possibility that he is a chronic Salmonella carrier state, which can lead to progressing extraintestinal salmonellosis.



Image 1: Patient's parotid abscess after second I&D with surgical gauze in place.

# Conclusion

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## Conclusion

- This case illustrates a rare entity of extraintestinal salmonellosis which can be seen in immunocompromised, even less common in immunocompetent individuals. A highly unusual diagnosis, that was seen in this patient. A diagnosis of Group D Salmonella, non typhoidal which can lead to the extraintestinal findings of the parotid abscess. Recognizing that salmonella is a plausible organism when dealing with infectious cases, even in the immunocompetent.
- Differentiating between the serotypes of Salmonella.
- Understanding that Fluoroquinolones are the preferred Antibiotic of choice when dealing with Salmonella species.

# Lessons

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## Lessons

- Salmonella is one of the major causes of gastrointestinal infections. Salmonella is a gram negative rod, Enterobacteriaceae
- This organism has many serotypes and is broken down into two different groups.
- Salmonella species are responsible for many public health outbreaks, it is important to understand that it can cause Gastrointestinal infections, but is still a differential for other infections outside of the gastrointestinal tract.
- It can be seen largely in immunocompromised individuals, however in a small population of immunocompetent as well.

# References

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