

Reptile-Associated Salmonella in a Non-Weaned Infant: A Case Report

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DOI: <https://doi.org/10.36347/sasjm.2024.v10i12.013>

Received: 14.11.2024 | Accepted: 19.12.2024 | Published: 24.12.2024

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Abstract

Original Research Article

Infections with Salmonella in newborns are rare in the UK, especially in non-weaned infants who have not recently traveled or been exposed to certain foods. In this case report, a 24-week-old male newborn had diarrhea that had persisted for more than a week, no vomiting or blood in his feces, and no notable family history of sickness. Through microbiological stool culture Salmonella infection was confirmed. A pet ball python at residence was discovered during the collateral history, indicating a transmission associated to reptiles. Without the use of antibiotics, the baby recovered. Guidelines from Public Health England place a strong emphasis on taking preventative action to lower the number of Salmonella infections linked to reptiles. In addressing pediatric cases, this instance emphasizes the importance of getting a thorough history and being cognizant of non-traditional avenues of transmission.

Keywords: Salmonella, Reptile-associated infections, Infant diarrhoea, Public health, Case report.

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INTRODUCTION

Though salmonella infections are usually caused by food, they can sometimes occasionally come from unusual sources, such as reptiles. Because their immune systems are still developing, infants are more susceptible to illnesses. Infections linked to reptiles have been reported worldwide, despite Salmonella being less prevalent in the UK. The significance of identifying unusual transmission channels is highlighted by this article, which examines a case of Salmonella in a non-weaned newborn that was probably connected to a pet ball python (Bernar, Gande, Bernar, Müller, & Schönlaub, 2023).

Research indicates that reptiles frequently retain the bacterium asymptotically. According to recent studies, 36.9% of lizards and up to 56% of snakes may have Salmonella in their typical gut micro biome (Mitchell, 2011).

Since their immune systems are still developing, children under five, especially babies, are more vulnerable to RAS. Direct contact with reptiles or indirect contact with contaminated surfaces and surroundings can also result in transmission. To reduce the risk of illness, hygiene measures are essential, such as washing your hands after handling reptiles or their habitats (Centers for Disease Control and Prevention,

2021) (Marin, Lorenzo-Rebenaque, Laso, Villora-Gonzalez, & Vega, 2021).

Recent research have shown that Salmonella strains that are resistant to many drugs have emerged in reptiles, which is concerning. These resistant strains make treatment more difficult and highlight how crucial prevention is. Guidelines for public health have been created to inform reptile owners of the dangers and proper care methods (Marin *et al.*, 2021).

The goal of this case study is to draw attention to a rare occurrence of Salmonella infection in a non-weaned baby in the United Kingdom, highlighting the possible source of transmission that reptiles may represent. It highlights the value of taking a complete medical history in pediatric cases and the applicability of Public Health England's recommendations for avoiding Salmonella infections linked to reptiles.

Recovery without drugs is exclusive in such diseases, and the report specifically specifies a ball python as the source of transmission.

It emphasizes preventive measures for families with reptiles and draws attention to non-traditional infection pathways in infants.

In order to manage these infections, it is crucial to identify non-traditional transmission pathways, put public health recommendations into practice (Smith & Whitfield, 2012).

CASE REPORT

A 24-week-old boy baby had fever, decreased oral intake, and diarrhea that lasted more than a week. There was no history of vomiting or recent travel, and there was no blood in the feces. There were no symptoms in either parent. Salmonella species were confirmed by stool culture. After more investigation, the family revealed that they owned a ball python kept in a cage that was routinely cleaned. Experts in microbiology linked the infection to contact with reptiles. Antibiotics were judged unnecessary because the baby recovered with supportive care. The family was given advice on lowering the risks of Salmonella infections linked to reptiles, and public health authorities were notified.

DISCUSSION

A 24-week-old boy newborn experienced diarrhea that persisted for over a week, fever, and decreased oral intake. There was no blood in the feces, and there was no history of recent travel or vomiting. Neither parent exhibited any signs. Stool culture was used to confirm the species of Salmonella. Following additional research, the family disclosed that they had a ball python housed in a regularly cleaned cage. Microbiology experts connected the infection to interaction with reptiles. Since the baby recovered with supportive care, antibiotics were deemed unnecessary. Public health officials were alerted, and the family was given tips on reducing the risk of Salmonella illnesses associated with reptiles.

CONCLUSION

This example emphasizes how crucial it is to take Salmonella linked to reptiles into account when treating pediatric patient who have inexplicable diarrhea. It is essential to take a thorough history and follow public health recommendations. Asymptomatic cases may not require antibiotics, underscoring the importance of supportive care in treatment.

ACKNOWLEDGEMENTS

I want to express my gratitude to the microbiology department for their input on proper management and their insights into the infection's origin. A special thank you to Public Health England for sharing these helpful resources and guidance on Salmonella infections related to reptile. Last but not least, I commend the family's support in this case, as their comprehension and commitment to guidance were essential to managing this situation.

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