

# SCHISTOSOMUS REFLEXUS: ANATOMICAL STUDY OF TWO CASES IN THE PORCINE SPECIES

By Laura Bordas Bruch  
Autonomous University of Barcelona  
Faculty of Veterinary Medicine  
June 2020

## INTRODUCTION

Schistosomus reflexus (SR) is a rare type of fetal monstrosity seen primarily in cattle. This fatal congenital syndrome is characterized by the presence of exposed abdominal and sometimes thoracic viscera (schistosomus), and marked spinal inversion producing a distinctive ventral convex curvature (reflexus).

## OBJECTIVES

- ❖ Describe morphologically the cases.
- ❖ Study the general structure of the skeleton and the particularities of the different bones using a CT scan with 3D reconstruction.
- ❖ Diagnose the malformation, the various forms of presentation and the prognosis of a fetus with these particularities.

Abdominal and thoracic viscera exposed

Spinal inversion

Arthrogryposis of the limbs

Hemimelia

Palatoschisis

Cheiloschisis

Syndactyly



Figure 1. Schistosomus reflexus in animal 1.

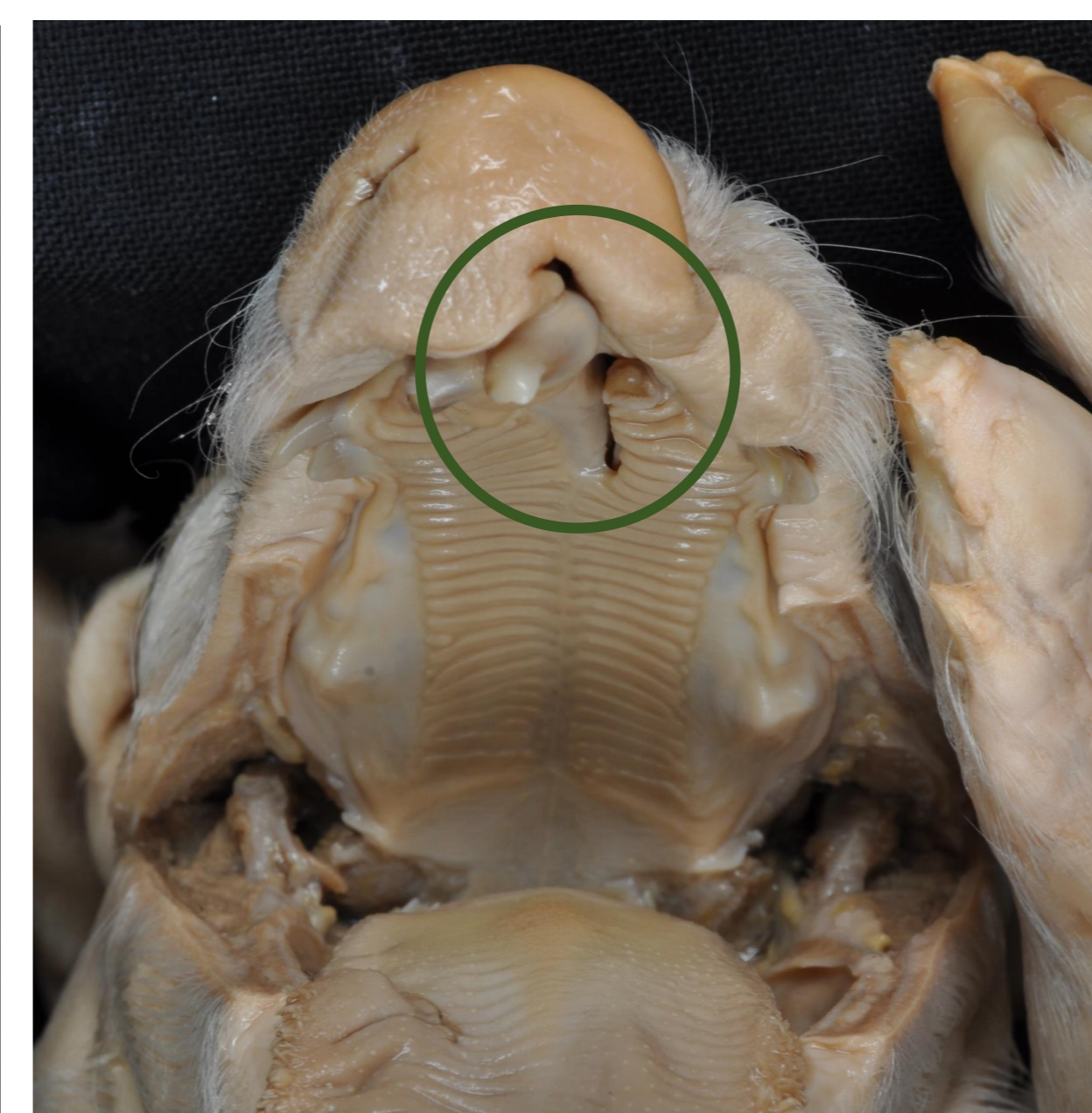


Figure 2. Palatoschisis and Cheiloschisis in animal 2.



Figure 3. Hemimelia in animal 1.

## EXTERNAL FINDINGS

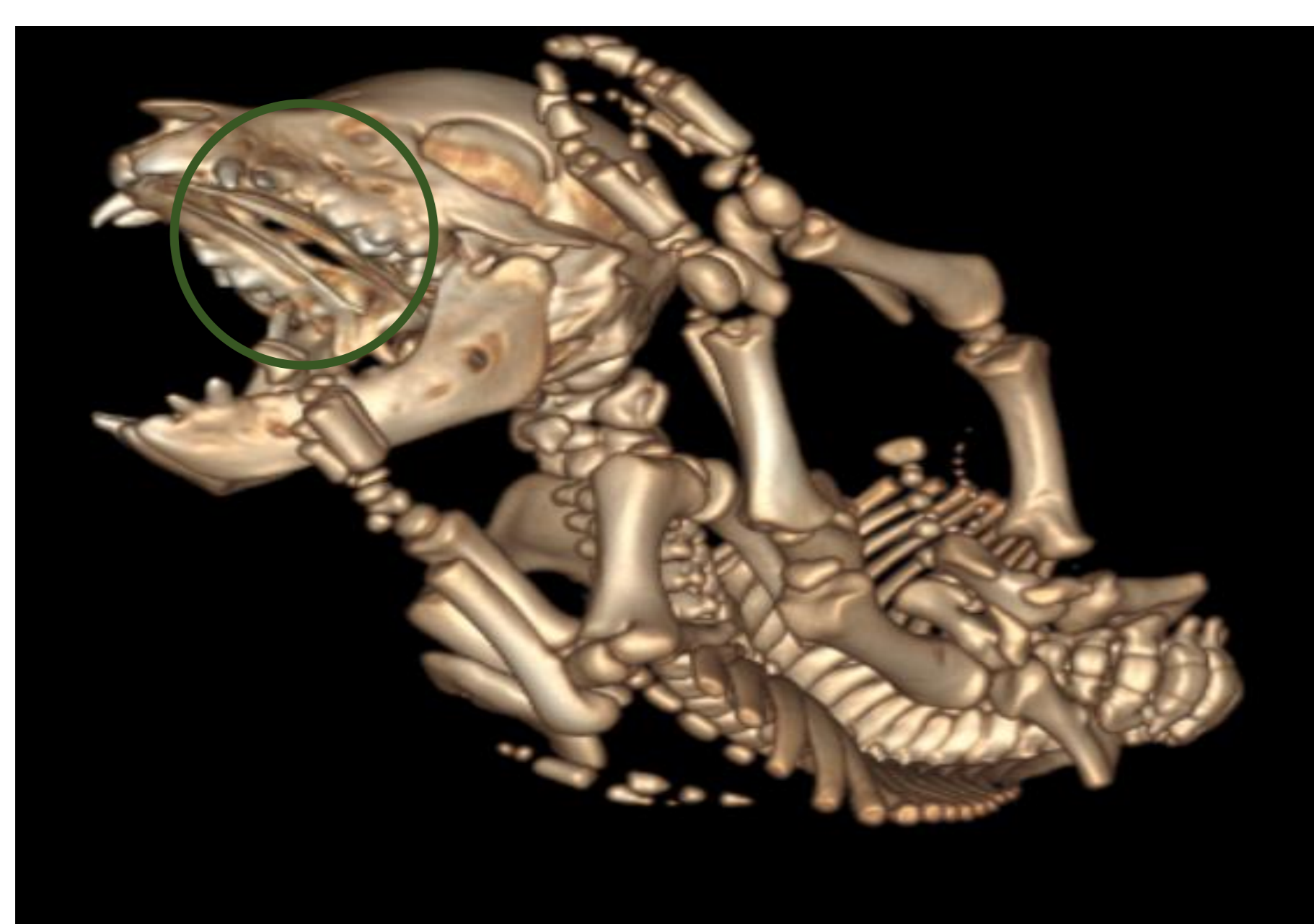


Figure 4. Palatoschisis in animal 1.

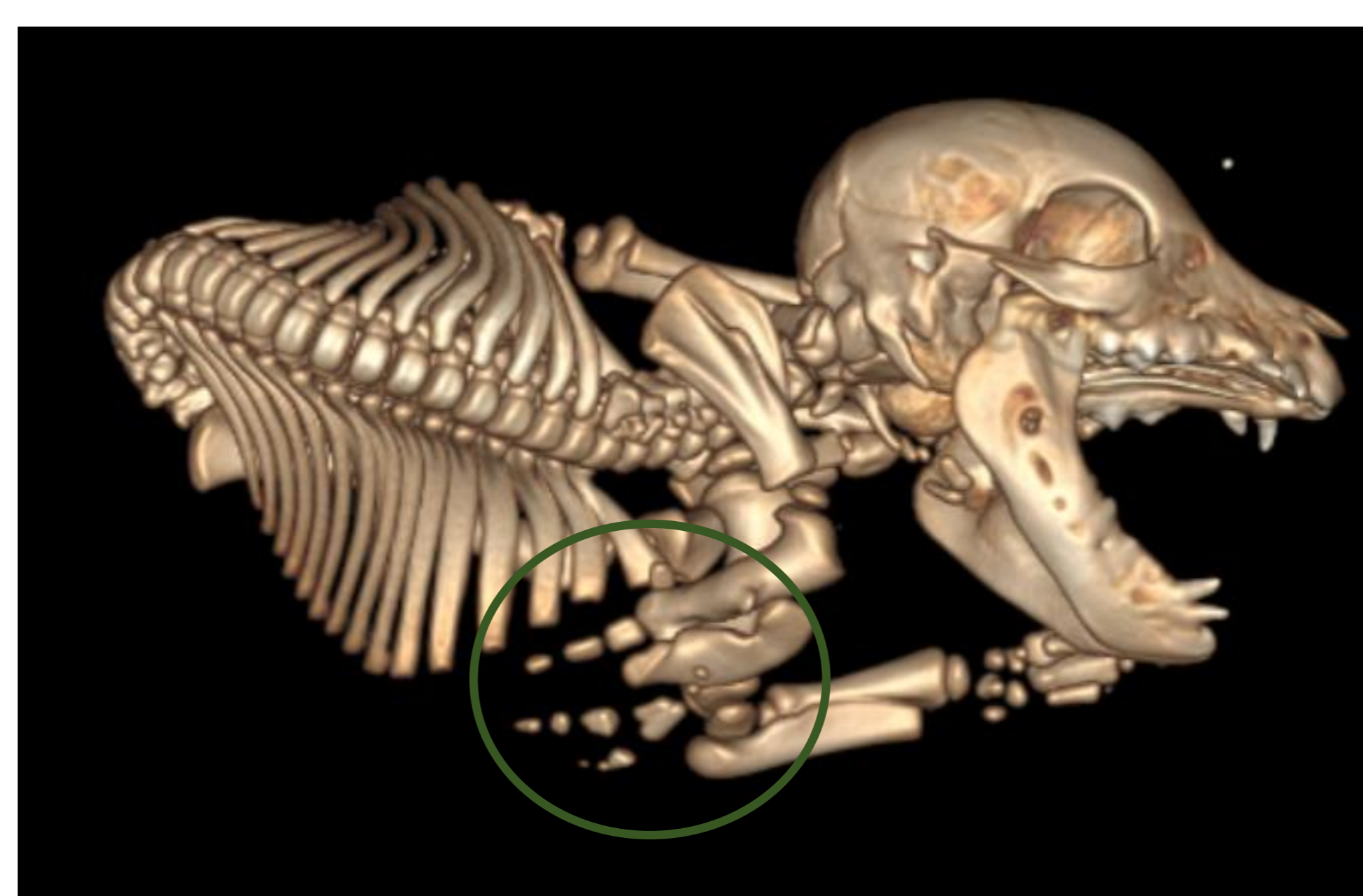


Figure 5. Absent radius and finger fusion in animal 1.

Scoliosis

↓ Sternebrae

Abnormality of the maxilla:  
Palatoschisis

Absent radius

Finger fusion

## TC FINDINGS

## CONCLUSIONS

Considering all the external and internal features, it can be affirmed that they are cases of Schistosomus Reflexus.

The syndrome defining defects are eventration of the abdominal viscera, spinal inversion and the positioning of the limbs adjacent to the head and their subsequent ankylosis. A wide variety of other structural abnormalities are frequently observed in cases of SR.

The embryological mechanism by which a SR fetus develops is unknown.

Syndromes similar to SR exist in other species.