

P106

Isabelle CORRÉGÉ¹, Elisabeth SALLÉ², Loïc VOLANT²

¹ IFIP – Institut du porc, Domaine de la Motte au Vicomte, BP 35104, 35651, Le Rheu Cedex;

² MSD Santé Animale, rue Olivier de Serres – BP 171, 49071 Beaucouzé Cedex, France
“2012-MS-0600”; isabelle.correge@ifip.asso.fr

LESIONAL DIAGNOSIS OF ATROPHIC RHINITIS: COMPARISON OF THE LESION SCORE PERFORMED ON SNOOTS SECTIONS AND THOSE MADE ON COMPUTER TOMOGRAPHY IMAGES (CT)

Atrophic Rhinitis prevalence is often assessed by scoring nasal lesions after cutting snouts at the slaughterhouse, however, the saw blade can damage the snout structure. The objective of this study is to compare the rhinitis lesions scored performed on snout sections with a saw and those made on computer tomography images (CT). The influence of the anatomical area section is also studied. 203 snouts, from 5 batches, with intensity lesions from medium to high atrophic rhinitis were collected at the slaughterhouse. Cross sectioned images were taken every millimetre by CT, then snouts were cut with a hand-held saw. Sections of snouts and CT images obtained at the first premolars were graded by an experienced operator; according to the IFIP reference method (scored 0 to 20). To assess the impact of the cutting area, 50 snouts were scored on three tomography images taken at the first premolars, at one centimeter in front and one centimetre behind, by 5 experienced operators.

Cutting with a saw did not change the nasal septum and the turbinates structure: 99 % of the snouts had the same score as CT.

The atypical morphologies of the turbinate structure (turbinate crushed, partially joint or with a winding inverted concave structure instead of convex), observed after sectioning some snouts, were still present on the CT images. These atypical morphologies reduce the filtering effects of the turbinates and increase the expression of respiratory disease. The causes of which need to be examined; genetics, ambient conditions, some pathogens or their toxins?

At one centimetre in front of the first upper premolars, the score was significantly higher (more atrophys of turbinates and less deviated septum); one centimetre back, the score was the same. It is advisable to make the cut just after the first premolar and not score the snouts before cutting.