

# **Advances in Equine Nutrition**

## Volume III

Edited by

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# INCIDENCE OF RADIOGRAPHIC CHANGES IN THOROUGHBRED YEARLINGS. 755 CASES

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## Introduction

The objective of this retrospective study was to record the incidence of radiographic changes in a proportion of Thoroughbred yearlings being presented for sale in 2003.

## Methods and Materials

Reports were gathered from 755 yearling presale radiographic examinations. These reports were composed by A.R. Adkins, S. Hance, P. Todhunter and P. Adams, using similar criteria to that in the Kane et al study of 1162 yearlings. For uniformity, all sets of radiographs were assessed by at least two of the aforementioned veterinarians. Each radiographic examination included a complete set of the 34 views required for the Australian Repository System. For this study each joint was examined separately and as a pair.

## Results

See table overleaf.

\* Bracketed numbers indicate number of horses affected.

## Relevance to Clinical Practice

The results of this study provide a database for ongoing assessment of the significance of particular lesions, evident as radiographic change, in relation to future performance. These results also provide insight into the level of occurrence of certain lesions and hence may be useful in radiographic assessment on an everyday clinical level. Individual breeders may use this information to compare the incidence of lesions occurring on their studs. The presale radiography of yearlings is a relatively new procedure in the Australian Thoroughbred industry and these results in combination with future results may enhance the selection information available to prospective buyers.

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<b>FRONT FETLOCKS</b>	<i>% horses affected*</i>	<b>HIND FETLOCKS</b>	<i>% horses affected*</i>
<b>SAGITTAL RIDGE OCD</b>		<b>SAGITTAL RIDGE OCD</b>	
- Lysis/Flattening	28.3% (214)	- Lysis/Flattening	5.2% (39)
- Type II (fragmentation)	0.7% (5)	- Type II (fragmentation)	2% (15)
<b>OSTEOCHONDRAL FRACTURES</b>		<b>OSTEOCHONDRAL FRACTURES</b>	
- Dorsal Fetlock Joint	1.7% (13)	- Dorsal Fetlock Joint	3.3% (25)
- Palmar Fetlock Joint	0.5% (4)	- Plantar Fetlock Joint	6.2% (47)
- Sesamoid		- Sesamoid	
• Non-healed	0.5% (4)	• Non-healed	3% (23)
• Healed	0.9% (7)	• Healed	0.6% (5)
<b>DISTAL MCIII CYSTS P1/P2 CHANGES</b>		<b>DISTAL MTIII CYSTS P1/P2 CHANGES</b>	
- Cysts	0.7% (5)	- Cysts	0.4% (3)
- Osteochondral Fractures	0.1% (1)	- Osteochondral Fractures	0.5% (4)
- Osteoarthritis	0.3% (2)	- Osteoarthritis	0.1% (1)
<b>SUPRACONDYLAR LYSIS</b>	1.5% (11)	<b>SUPRACONDYLAR LYSIS</b>	0.1% (1)
<b>CARPI</b>		<b>TARSI</b>	
<b>OSTEOCHONDRAL FRACTURE</b>		<b>HOCK OCD</b>	
- Radiocarpal Joint	(2)	- Distal Intermediate Ridge	5% (38)
- Dorsal Midcarpal Joint	(8)	- Lateral Trochlear Ridge	2.6% (20)
- Palmar Carpal Joint	(4)	- Medial Trochlear Ridge	0.9% (7)
- Accessory Carpal Bone	(3)	- Medial Malleolus	1.8% (14)
<b>OSTEOPHYTES CYSTS</b>	2.6% (20) 0.2% (2)	<b>DISTAL TARSAL JOINT</b>	
		- Osteophytes	26.5% (200)
		- Collapse	0.6% (5)
<b>STIFLES</b>		<b>FRONT FEET</b>	
<b>FEMOROPATELLAR OCD</b>		<b>Dorsal P3 Changes</b>	
- Lateral Trochlear Ridge	3.8% (29)		4.4% (33)
• <2 cm	1.7% (13)	<b>Extensor Process Fractures</b>	0.8% (6)
• 2-4 cm	2% (15)		
• >4 cm	0.1% (1)	<b>Club Feet</b>	0.8% (6)
- Medial Trochlear Ridge	0.8% (6)		
<b>DISTAL PATELLA LYSIS</b>	0.7% (5)	<b>Palmar Process Fractures</b>	0.1% (1)
<b>STIFLE CYSTS</b>		<b>Solar Margin Fractures</b>	0.1% (1)
- Medial Femoral Condyle	3.4% (26)		
5 – 4 mm to 15 – 22 mm			
- Lateral Femoral Condyle	0.1% (1)		
<b>FLATTENING</b>			
- Medial Femoral Condyle	7.4% (56)		