Tail-base lesions in donkeys carrying tourists in Jordan: risk factors and tourist attitudes to donkey welfare

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Almost 40 million donkeys live in the developing world. Their welfare problems are highly prevalent and often severe.

At the time of this study, 86 donkeys were being used to carry tourists up the 900 steps at Petra (Fig. 1). Each donkey is attended by a local Bedouin. The work is poorly paid, and many attendants are children.

Tail-base lesions were found in 63 of the 86 donkeys (Fig. 2). Lesions severity was scored (0 = no lesion, 6 = deep lesion, larger than 1x1 cm).

Results. Lesions were more severe with:
- **Padded** straps, if they were also tightly fitted (Median (IQR) lesion score: 5.0 (2.0-5.0) vs 0.0 (0.0-2.75); n ≥ 11/group; P = 0.010) (Fig. 3B)
- **Cotton** straps rather than synthetic ones (2.5 (1.0-5.0) vs 1.5 (0.0-3.0); n ≥ 34/group; P = 0.002) (Fig. 3C)
- Straps that were dirty (5.0 (2.0-5.0) vs 2.0 (0.0-3.0); n ≥ 31/group; P = 0.001) (Fig. 3D)

Tourists showed little awareness of donkey welfare. Most (37%) chose the first donkey they came across. 28% chose strong, healthy donkeys, which could be through concern for their own welfare or that of the donkeys.

Conclusion. Using clean, soft synthetic straps could prevent lesions in a cost-effective, sustainable manner. Padding could cause lesions, or be a response to them. However, it seemed ineffective in this soft tissue area, and may only protect bony prominences.

The results are correlational so further work is required for confirmation.

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**Fig. 1.** Photographs of donkeys carrying tourists at Petra.

**Fig. 2.** Photographs illustrating two severe tail-base lesions (score 6) at Petra. (B) also shows an associated rump strap.

Data on possible risk factors were collected using direct observations and questionnaires.

Assessment included:
- **Donkey** health and behaviour
- The improvised **rump strap** that passes under the tail to secure the saddle (Figs 2B and 3A)
- **Attendant** attitude and husbandry routines
- **Tourist** attitude (to assess commercial pressures)


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