

## **THE INFLUENCE OF DIFFERENT HYGIENIC AND MANAGEMENT SYSTEMS ON THE HEALTHY CONDITION OF HORSE HOOF**

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### **Introduction**

Most of hoof disorder problem are connected with inappropriate hygienic treatment or prophylaxis. Poor condition of horse hoof have huge influence on horse behavior and will to work. In extremity state of neglect it can be the reason of Heath (2,4). The hoof Heath depends on hygienic value of all stable, and experience of Staff. That's why the boxes or kennels should be cleaned every day and put a new layer of clean dry straw (4).

Basic treatment with hoofs should be every day clearing of hoofs sometimes it is necessary to clean the frogs and grooves more than once a day. Lack of suitable wearing thin the hoofs should be compensate by correction of growing New Horn, or if the Horn is wearing thin too fast there is recommended to shoe it. So the basis of good working horse is systematic cleaning of hoofs and correction of horn (4).

The quality of hoof horn in domestic horses is different than he hoof quality free-living horses. Hardness and endurance of domestic hoof horn is quite poor in comparison with wildlife. Hoofs of domestic horses are additionally ballasted by rider or by work, what have negative influence on hoofs health and condition (1). Horses working on sandy soils in dry climate are not often shod especially if they hale good shape of hoof. If they work on heavy moist soils or work on asphalt or concrete roads should be shod (3). This is necessary to avoid excessively wearing thin of the hoofs because it can be reason of long term lerne and serious illness (2).

### **Material and Methods**

The investigation and diagnostic was carried out in three stables:

1. Stable I was large stable in South Silesia.
  - Bedding in boxes were straw
  - Horses are on the pasture but not all day
2. Stable II was small stable in South Silesia.
  - Bedding in boxes were straw

- During spring and summer most of mares and foals were 24 hours on pasture
3. Stable III with kennels was located near Warsaw
- Bedding in boxes were sawdust
  - Horses are only on the small sandy paddocks.

## Results and Discussion

Diagnostic of hoof condition in adult horses;

Tab. 1. Diagnostic of hoof condition in first examined stable I

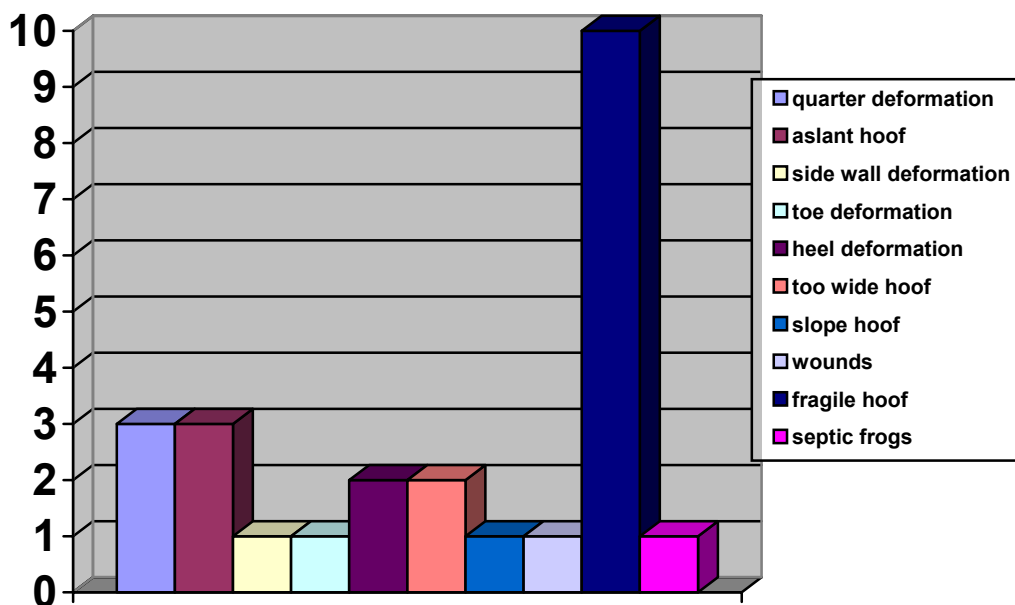
Horse	Age in years	Gender	Use	Irregularity disorders
1	7	Stallion	Breeding	Deformation in side wall (front right)
2	6	Mare	Sport -carts	Break off piece of hoof on toe on concrete floor (left front)
3	3	Stallion	Sport -carts	Aslant hoofs (front right)
4	6	Mare	Breeding	Aslant hoof with shallow loss (left front)
5	9	Mare	Breeding	Wound aside hoof on coronet and bulb
6	6	Mare	Breeding	Crooked hoof
7	7	Mare	Breeding	Too wide front hoofs
8	19	Stallion	Breeding-	Septic frog
9	7	Mare	Breeding	Long breaks in side wall
10	5	Mare	Breeding	Break in side wall, toe and hill
11	6	Mare	Breeding	Shallow frog and sole

Tab. 2. Diagnostic of hoof condition in first examined stable II

Horse	Age	Gender	Use	Irregularity disorders
1	7	Stallion	Breeding and recreation	Short heels
2	4	Mare	Breeding and recreation	Tall heels
3	9	Stallion	Breeding and recreation	Too dry hoof
4	12	Mare	Breeding and recreation	Too dry hoof

Tab. 3. Diagnostic of hoof condition in first examined stable III

Horse	Age	Gender	Use	Irregularity disorders
1	15	Stallion	Recreation	Hoofs without correction bad hygienic condition – neglect
2	4	Stallion	Recreation	Deformations around side walls
3	8	Mare	Recreation	Hoofs without correction bad hygienic condition, - neglect, aslant and braked off pieces of side wall
4	16	Mare	Recreation	hoofs without correction, fragile walls, heels
5	14	Mare	Recreation	Aslant heel, fragile side wall, white line, lateral groove
6	10	Mare	Recreation	hoofs without correction bad hygienic condition – neglect



**Fig 1. The heel defects**

The most common disorder of horse hoof in all stables was the poor quality of hoof horn. In many cases it were too, dry without correction and fragile. We observed many losses, cracks and breakings off. The reason of that situation were concrete floor and poor hygienic treatment. The other reason was fact that horses were without horseshoes.

Many of this disorders origin from irregular shape – aslant hoof, slope, side wall deformations etc. Very often disorders origin from poor or rarely hoof clearing especially frog and lateral groove and median groove neglect.

The worst condition represent table Nr III. This group were old horses 10-16 years old. Their Heath status were worse than in other two examined stables. Hoofs of those horses were cleaned very rarely what was the reason of septic frog, and breaks in side wall.

The best hoofs were observed and diagnosed in the second group were mares were all day on pasture. The hoofs were strong, hard and with regular shape.

### Conclusions

1. We estimated that flooring have lower influence on hoof disorders than pore hygienic treatment.
2. Both - intensive horse use and neglect is the reason of damage and illness of hoofs and legs
3. Older horses treat in poor hygienic conditions have worst hoof disorders.



Fig 2. Good condition hoof .



Fig 3. Poor condition hoof.



Fig 4. Wounds origin from slope hoof



Fig 5. Septic frog in three hoofs

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