lesions scored in left rear limb of the cows based on a
three point scale as one considered as normal and three
as severely injured. Scoring was done by two
independent observers and the average of values
between two observers was used for further
assessments. Observations between two observers
were significantly different in LH scores one and two
(Chi-Square, P<0.05). However the agreements
recorded as 92.67%, 33.58 and 33.3 % in LH and
88.5%, 73.2% and 21.7 % in TC scores between two
observers in scores one to three respectively. A
significant difference recorded in TC scores (P<0.05)
(1.23 ± 0.38, 1.46 ± 0.5 and 1.78 ± 0.52 in LS, FSY and
FS groups respectively). Average of TC and LT scores
in the first party (LT: 1.14 ± 0.35, TC: 1.42 ± 0.52) was
significantly lower than higher parities (LT: 1.22 ±
0.35, TC: 1.60 ± 0.53) (P<0.05). No significant
difference recorded in different days in milk. Cows
with average production of 25 liters and higher/day
showed lower TC scores (1.51 ± 0.53) than cows with
less than 25 liters/day production (1.68 ± 0.52) (P<0.05).
Science free stall designs are the same in both free stall
systems, higher score in FS system maybe a result of
longer resting time in their stalls.

Application of surgical shoeing in horses with
vertical hoof crack (12 cases)

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Vertical hoof cracks happen in the wall of the hoof
so that they begin at the coronet and running parallel to
the horn tubules forward to the ground surface. They
also start from ground surface to upward. These cracks
occur most common in racehorses. Excess drying of
the hoof, trauma, and conformational faults are the
most factors likely cause these separations. A crack in
the horn emanating from the coronet is most obvious
sign. If infection is established, there may be a bloody
or purulent discharge and signs of inflammation and
lameness. Twelve adult cross breed horses suffering
hoof crack were evaluated. Some of them have deep
vertical crack in quarter area as a grass crack and others
have cracks happened in lateral site of toe and middle
of it as a sand crack. Case no. 1, 3 and 4 have grade 4 of
lameness according to AAEP in the lame limb. In case
no.2 and 7 it was appeared lameness with grade 3,
resulted from inflammation of live underlay tissue.
Surgical horseshoeing was carried on by a farrier under
supervision a veterinarian surgeon in each case. In
these cases, hot shoeing was applied for making some
eggs, straight or heart bar shoe. Hoof packing and
mesh, screw and plate or technovite were applied to
decrease of the crack layers movement. Results of
repair were acceptable in some cases after 3 and some
after 6 months. In quarter cracks, the lameness was
treated and the hoof wall was growing close to fully. In
toe cracks, fully supported of the hoof wall was
occurred and the tenderness of the soft tissue was
decreased. Therapy of these cracks involves surgery
and corrective shoeing to change the distribution of
weight on the hoof. Growth of new horn may be
encouraged by application of a counterirritant (eg,
tincture of iodine) to the coronet over the crack. If the
crack has become infected, apply an antisepic pack
wall. It is worth to mention that hot shoeing and shoe
making in the filed depend on the hoof problems could
be effective in treatment of the hoof cracks.

"Coring" fin alternative technique for the
application of deep digital sepsis in
cows

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Deep digital sepsis is a condition which can be
triggered by puncture wound and an infected sole ulcer
and has often become incidental and multiple
structures within the foot including digital cushion, the
navicular bursa the digital interphalangeal joint and
sometimes the flexor sheaths. Resolution of the
necrotic processes in these structures sometimes
reaching by aggressive antibiotic therapy along with
trimming and blocking the foot. "Coring" is a surgical
option for treatment the advance cases to save the
affected cows from casualty slaughter. Twelve milking
cows with sever deep digital sepsis was studied
clinically and the Coring as an alternative to digit
amputation introduced by blowey1990 was performed
under field condition. Defect in the horn of lateral claw
of the hind limbs in the form of sole ulcer were
identified in all cows under study. Following
application of a block to the sound claw a hoof knife is
inserted through the sole of the affected claw and into
the necrotic area. Moving in a circular "Coring" motion
of hoof knife and producing a hole 3 or 4 cm diameter
in the planter aspect of the foot and extending to the full
depth of the lesion was the procedure accomplished in
all diseased cows. Daily flushing the hole with running
water recommended for 4 consecutive days just to
prevent the hole becomes block with either faecal or
bedding material or the granulation tissue.
recovery and soundness were achieved in 10 of the diseased claws within 15 to 25 days. Results showed that among the other surgical options such as digital amputation, navicular bursa resection, drilling and flushing, coring is more feasible and less expensive, technique with no need of parenteral broad spectrum antibiotic therapy can be applied under field condition.

Distribution of different hoof lesions in different hoof trimming timings

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Lameness in dairy cattle is a major source of economic loss. These losses not only include treatment costs, but also reduced milk production and fertility and are increased culling rate. Besides the economic losses concerned with lameness, claw disorders also have a serious impact on animal welfare. Claw disorders are frequently reported in dairy cattle all over the world as 90% of all lameness incidents are due to these disorders. Claw disorders are distinguished at clinical level (i.e. being lame) and at subclinical level (i.e. digital disorders recognizable at hoof trimming). Study was done in a dairy herd with 800 milking cows. The cows were trimmed on a regular basis in five groups. Cows were trimmed 120 days after parturition (Group I), immediately before drying off (Group II), High locomotion scored cows (Group III), reproductive delayed cows (Group IV) and visually detected cows (Group V).Incidence of sole ulcer as the most important non infectious claw disorder and Interdigital Phlegmone as the most important infectious claw disorder was recorded in each of the above mentioned group and compared descriptively. 5.76 & 1.02 % of cows in group I, 2.58 & 0.73% of cows in Group II, 24.32 & 5.85 % of cows in group III, 5.4 & 0.9% of cows in group IV and 20.97 & 8.7% of cows in group V showed sole ulcer in Zone 4 and Interdigital Phlegmone in Zone O of the hoof respectively. Results shows that in clinical normal groups like groups I, II and IV still some cows got the sever lesion in their digits. It is obvious that any of these lesions will make their economical losses and just by doing a general hoof trimming program, access to all lesions is possible. Otherwise farmer should wait until the injuries change to sever ones and changing the locomotion of the cow. In other hand locomotion scoring is not always the method of choice in detecting all lesions. More sole ulcers were detected by locomotion scoring; anyway this method was not as potent as visual detection in Interdigital Phlegmone. Maybe more severe nature of the later made it more prevalent among visually detected lesions.

Distribution of hoof lesions by sex, breed, management, and laminitis related or non related lesions in sheep in Shiraz area

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Hoof lesions and lameness leads to reduce milk and wool production, infertility, increase treatment costs, and early culling in the herd. Since most of researches have been focused on cows, therefore, this study was planned to evaluate the lesions of the hooves of sheep in farms around the Shiraz area to analyze the sex, breed, management condition and laminitis related or non related lesions. For this study one hundred live sheep were selected randomly in 10 different farms. Also the legs of fifty sheep were collected from the slaughter house. Live sheep from both sexes and three breed (Ghesel, Mehraban, and mix) and different management condition were studied. The sheep were restrained, then the hooves of forelimbs and hind limbs were trimmed and the lesions were recorded. The hooves from slaughter house were from both sexes too. They were trimmed and lesions were recorded. Contrast media was injected and radiographs were obtained from the lesions in lateral, plantarodorsal and palmarodorsal position. Laminitis not related lesions were considered to be hoof crack, inward growth of toe, heel expansion, heel horn erosion, and foot rot. The Mehraban breed showed significantly (P ≤ 0.05) higher laminitis not related lesions in the forelimbs. Heel expansion was higher in indoor raised sheep, but hoof cracks were higher in outdoor raised sheep. Heel horn erosion and inward growth of toe were only in indoor raised sheep. Heel expansion and heel horn erosion were higher in male but hoof crack was only in female. Laminitis related lesions were classified as sole hemorrhage, sole ulcer, white line disease, cork screw, poor quality horn, double sole and excess growth of lateral wall. Sole hemorrhage was higher in Ghesel. Sole hemorrhage and white line diseases were higher in male and in indoor raised sheep, also excess growth of lateral wall was higher in male sheep. According to results of this study hoof trimming should be performed in the sheep flock once or twice a year. A planned hoof care is required for sheep.