

Excerpts Regarding Foot Problems and Lameness from Medical Records

Carolyn

Accession number 0680664

Est. DOB Feb. 11 1968 / Death April 11, 2000 32Y, 2M at death

Dam/Sire unknown/wild

“28 February 00 “Marked” lameness noted on right rear limb
Reluctant to move knee

11 April 2000 found dead in stall. Necropsy revealed “severe polynephritis” likely caused by chronic urinary tract infection. Cause of death was kidney failure.

Necropsy:

Right forefoot: Two defects/cracks at lateral toe.

Bilateral rear: Left [foot] has large defect parallel to surface at medial toe and a lesser crack in digit 3, Right foot has cracks cranially at digit 3 and laterally at digit 4.

Skeletal system: Left fore: Scapulohumeral joint: Mild cartilage erosion noted at the articular surfaces. Moderate articular erosion present at the medial and lateral portions of the elbow. Right forelimb joints appear within normal limits. Left coxofemoral joint: the femoral head has multiple irregular erosive to pitted lesions of the cartilage with osteophyte formation at the acetabulum. Left stifle: the lateral femoral condyle is approximately half the size of the right . . . the cartilage is irregularly eroded at the patellar groove. Cartilage has been lost from the distal half of the articular surface of the patella. The articular surface at the proximal tibia is eroded and pitted with osteophyte deposition. Right coxo-femoral joint changes are milder with respect to erosions and osteophyte formation, and the stifle has no erosions.

Clara

Accession Number 055667

Regional Studbook #235

Wild caught 1953 est date of birth 1953

Dam and Sire unknown/wild

purchased 1955 from Goebel L

18 February 2000 “sole abscess seems to have ruptured. Examination of sole reveals a soft tender spot approx 8 cm medial to lesion between toes. Also an open tract is present from this spot to lateral foot wall.

20 March 2000 “no change in lameness. Occasionally seen to lie down during the day (not usually done) . . . duration and progression of lesion raises concerns about potential osteomyelitis. Keepers inquired about possible analgesics.

23 March 2000 “specimen reluctant to lift left foot.”

19 April 2000 Clara is immobilized in elephant chute and sedated. Veterinarians note “marked undermining of sole”, cut away necrotic tissue. Appears that boot is placed on Clara at this time.

20 April 2000 note indicates that Clara removed the boot and “rubbed sole on chain until moderate hemorrhage”

2 May 2000 Clara is sedated to examine large swelling on left hip. Records note decubital sores on left side of face, left elbow and left hip “due to prolonged recumbency.” Entry also states “lance abscess.”

3 May 2000 Clara placed on banamine for 3 days.

July 20 notes that abscess is getting smaller and continue debriding. But new abscess found on right foot.

16 March 2001 notes a left rear – solar abscess. Wearing sandal daily.

18 June 2001 again notes left rear lesion.

1 Aug 2001 keepers report arthritis pain seems to be more prominent and consistent

16 Dec. 2001 note right rear limb crack. “sole of right hind foot is soft and can be undermined where lateral nail crack starts”

8 Jan 02

4 February 2002 “Left rear foot has deteriorated. Sole between the previous defect is undermined all the way to the third nail and keepers report tract to the cuticle of this nail as well. Recommend removing entire undermined sole and advised that nail may slough.” Right foot reported as improved but still debriding and wearing sandals on both feet.

28 November 2003 Right rear foot pad “completely healed” but left foot has “significant deficit” and “fluid pocket”.

18 March 2004 Right foot shows evidence of abscessation. Foot defect subsequently noted.

2 April 2004 Left rear foot continues to have subsolar abscess.

10 July 2004 ultrasound exam shows “small amount of fluid appreciated under damaged surface of both feet. Right foot has 3 X 3 cm soft area near center of the foot. Left foot 1.5 X 5 cm fissure near middle toe. Keepers continue to trim feet, flush and soak. Animal is wearing sandals on both rear feet.”

April 28, 2005 Placed on phenylbutazone (an NSAID) for “pain management” “until further notice.”

Rani

Accession Number 101145

Captive born, July 5th, 1996

Dam 876015 at Jacksonville Zoo and Gardens

Sire M85030 at Rosamund Gifford Zoo at Barnet

Loan from Jacksonville (896059)

27 August 2001 Intermittent lameness on left hind leg noted

6 September 2001 Crack in nail 6 cm on cranial aspect of mid nail of left hind foot

16 January 2002 Right rear leg nail crack extending to ¾ of nail on digit 5. “recommend paring to prevent further spreading. All feet show superficial circular defects, soft pads.”

13 Feb. 2002 Lameness in rear limbs. Put on phenylbutazone for 3 days.

Aug 2001- Feb 2002 – There are 26 entries which state “Problem: Lameness LEG (left hind) (suspected)”

8 January 2003 “keepers report intermittent chronic left rear leg lameness” noted.

26 March 2004 – Lameness not noted but “ventral aspect of medial nails on hind feet is deeply worn, somewhat sensitive. Discussed with ZM possibility of abnormal conformation, increased wear due to animals only recently being allowed out after being indoors all winter. (This animal is very active.), trauma on some object in exhibit or holding.”

4 July 2004 Stiff gait to rear limbs for last 48 hours. She is very hesitant to bend at the knee and the left rear limb is worse than the right. She is still moving around the stall and eating well, but she shuffles along and even occasionally circumducts her rear limbs to not have to bend. 3 days of phenylbutazone.

22 August 2004 Moving slowly. “stiff rear limbs” 3 more days of phenylbutazone.

Ellie

Accession Number 101144

Regional Studbook # 362?

Wild Born, Est. DOB 1971

Est. Age 34 Y, 5M, 17D, +/- 29 Years

Dam/Sire unknown/wild

On loan from Jacksonville Zoo (876515)

December 2001 Hemorrhoids noted.

16 January 2002 Annual exam: Animal ambulates with “stiff” front Right limb which the staff “considers normal” for this animal. Three of four feet show superficial circular depressions or deficits. Right front limb has lateral long crack in digit #1 with a moderate separation of nail bed on this leg. This separation is deep and material embedded within the .5 cm deficit. Recommend paring (trimming) margins of this deficit.

Right ear tear, lesion also noted. Hemorrhoids reduced in size. Healing ulcerated tissue near tail noted.

12 April 2002 Rectal Ultrasonography by Dr. Dennis Schmitt. Found to have healthy uterus but a cyst on one ovary.

Oct. 2002 Restrained for reproductive exam. Left ovary deemed normal, right ovary not examined. (fluid filled loop of intestine blocking view).

8 Jan 2003 Annual Exam. Dry cuticles, area over medial left rear hoof wall to be explored and small area on left elbow draining some purulent materials.

11 Feb. 2004 Annual Exam: Left foot also has cracks in nails 3 and 5 with some extensions into the cuticle noted. Suggest if crack grows out a bit that keepers try to incise horizontal line across the top to try to keep it from extending back to the cuticle. Other three feet look normal.

13 May 2004 Reproductive exam. “Dr. Dennis Schmitt feels Ellie may have a cyst on her left ovary which may be contributing to her abnormal endocrine profile. “ Give GnRH Im for 3 weeks and monitor progesterone.

27 July 2004 Another reproductive exam. Again left ovarian cyst suspected. GnRH given to stimulate a normal cycle of breeding if it is not an ovarian cyst and if it is should cause luteinization of the cyst.

9 –11 Sept 2004 Ellie put with Raja and bred.

28 December 2004 Diagnosis of pregnancy supported by ultrasound and elevated progesterone level.

January 2005 Annual Exam. Feet deemed healthy

2 Feb. 2005 “Tail wound from bite.”

Donna

Accession Number 071665

Regional Studbook # 235

Estimated birth date May '71, Est. Age 34 Y, 2 M

Sire and Dam unknown/wild
Purchased from Goebel L

Dermocytosis of front feet noted July '00. "No treatment at this time as animal is now spending more time outside, where the feet are dry and in more sunshine."

2 March 01 Right tusk broke off 1 inch below gumline. Purulent discharge present. "Sole abscess" plus crack that has been "managed for several months" in nail 3 of left front.

16 March 01 Annual exam. Left tusk crack. Right tusk broken below gingival surface, mild superficial infection present, being managed appropriately with flushing. Feet – Right Front: thickened cuticles extending to sole. Left front: cuticles overgrown, sole smooth but has soft spot adjacent to third nail, third nail split distally. Right and Left rear: Pad healthy, cuticles overgrown, some superficial cracks in pad.

4 April 01 Soft spot/lesion (previously referred to as abscess) continues on left front foot adjacent to nail 3. Note indicates keeper trimming overlying horn.

6 April 01 Ultrasound of "solar abscess" on left front foot done. "Keepers to continue debriding this area."

9 January 02 Animal is diagnosed as overweight. Left front foot abscess still present. All four feet show circular erosions. Feet of right and left forelimbs have significant cracks in nails. Subsequent entries do not mention abscess.

12 April 2002 Reproductive exam. "Rectal ultrasonography by Dr. Dennis Schmitt revealed multiple endometrial cysts, rendering this cow non-reproductive."

7 January 2003 physical exam reveals superficial erosions on all feet, but feet deemed "healthy." Left front foot has crack that keepers continue to trim. Both tusks have been broken but have now grown beyond the gingival rim. Distal tail missing (chronic injury).

10 February 04 Deep soft spot on left front foot. "Keeper reports that site heals and then breaks open again."

27 January 2005 Left front foot soaked regularly due to soft spot on sole below 3rd nail. 3rd nail also has crack. RF has cracks on nails 3 and 4. Foot is soaked twice weekly. Left rear has cracks on nails 2, 3, 4 but "all are in good condition." "This animal always had challenges with its nails," but notes nails look healthy and elephant team is doing well in managing the cracks in the nails.

Pearl

Accession Number 073666

Regional Studbook # 234

Est. DOB 1971

Dam and Sire unknown/wild

Acquired from Southwick Nov '73
Loaned to Dickerson Mar '90
Returned to St Louis Sept '91

1 December 2000 Nail crack in 3rd toe of left front

7 March 2001 Front left foot, Rear feet have soft pads due to chronic wetness from urinary incontinence (result of prolapsed uterus). This also causes burning of skin on back of legs.

10 January 2002 physical exam. Nails ok on right front foot but sole has multiple superficial erosions covering 60 percent of surface. Left front foot Toe 5 “full thickness top to bottom crack that has been present for approx 1 year. Keepers continue corrective trimming. Sole also has multiple superficial erosions. Rear feet: nails soft (suspect from urine wetting), soles have superficial ulcers covering approximately 40 percent of sole. Skin and margins of soles erythematous and soft with some superficial sloughing due to urine scald.

8 August 2002 – 5 September 2002 Front left quarter lameness recorded. Elephant put on phenylbutazone.

26 Sept. 2002 – Transrectal and transdermal ultrasonic evaluation of perineal hernia confirms herniated uterine horn ventral to tail and pooling urine ventrally. Pooled fluid (urine) has flocculent appearance. Several endometrial cysts are present throughout uterine mucosa, several uterine masses are present (polyp or neoplasms.)

10 January 2003 Physical exam notes hoof crack on lateral digit of left front foot and also a cuticle abscess that erupted “earlier this week” but is “quiescent now”. Both rear feet have soft soles and hooves due to chronic urine dribbling from incontinence– soft almost gelatinous tissue noted in interdigital space, does not go deeply when trimmed with a hoof knife.

30 December 2003 “This elephant has been subjected to some aggression from the male, so elevation [of white blood cell count] may be stress-related.”

12 Feb. 2004 Routine Physical. All feet look okay, only minor cracks in toes, no splits in soles.

26 Jan 2005 Uterine prolapse still present, not thought to “compromise her healthy (sic).” No evidence of urine scald on this exam. Foot exam – both front feet have small (1-2 cm), superficial (5 mm deep) irregularities on the sole surface, however these are shallow and insignificant. Both back feet are in excellent condition.

11 Feb. 2005 “Left foot – a 2-5 cm fluid pocket is present 3 cm deep from the pad under the area of a superficial sole deficit. The elephant is not lame on this leg and it is suspected that the pocket is a seroma. No underlying lesions noted on right foot.

Note: A seroma, is an accumulation of serum that has accumulated in a dead space in the tissue. It is the result of tissue insult and the product of tissue inflammation and the body's defense mechanisms.

Raja

Accession number 921222

Regional Studbook # 339

Captive born at St Louis Zoo

DOB Dec. 27, 1992, Age 12Y, 7M

Dam 073666 Pearl

Sire 815 at Dickerson Park Zoo

11 Jan 2000 “Left tusk canal remains open [3 inches].” Keepers flushing daily, cleaning with cotton swab. Canal believed to be closed and no infection present.

14 March 2001 Annual Exam. Nail cracks noted on 3 of 4 feet. Tail tip is roughened (had been bitten as calf), right tusk has fractured end, left tusk has exposed pulp canal.

18 June 2001 Skin loss on trunk. Trauma is suspected cause.

15 January 2002 Annual Exam: Nail cracks in 3 of 4 feet. Pitted soles in front feet. Dry cracked heels in rear feet. Right tusk fractured at end, left tusk pulp canal exposure continues.

15 January 2003 Annual Exam: Superficial nail cracks noted on front feet. Feet described as healthy. Right tusk is shorter and cracked.

14 February 2004. Annual Exam: Superficial nail cracks on front feet “being monitored/stopped by keepers.” Left tusk has 4 inch longitudinal crack

29 January 2005 Minor cracks on front feet again noted.

Sri

Accession Number 101833

Regional Studbook # 247

Captive Born? Est DOB Jan. 1980

Est. Age 26

Dam/Sire unknown/wild

On loan from Seattle (21262)

No problems with feet noted here.

Wound on end of tail due to bite by male Feb. '04

Lesion on roof of mouth possible trauma Jan '04

Suspect Monocytosis and Iron Transport Disease or liver problems but not confirmed.

Annual Exam January 05 no abnormal findings, “all feet in excellent condition”

Suspected pregnancy Jan. '05 , later confirmed
Baby died in utero November 2005. As of Jan 2006, fetus has not been expelled.