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A NOTE ON SURVEY OF ETHNOVETERINARY TREATMENTS OF COMMON SURGICAL CONDITIONS OF LARGE RUMINANTS AND CAMELS

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A survey of ethnoveterinary treatments was done in 11 districts of Rajasthan (India) for commonly occurring surgical conditions of large ruminants and camels. The districts covered were Jaisalmer, Jodhpur, Barmer, Hanumangarh, Sriganganagar, Pali, Nagaur, Bikaner, Churu, Jalore and Udaipur. Overall 33 villages were covered and 99 traditional healers were interviewed.

The ethnoveterinary treatments were enquired for common surgical affections which included corneal opacity, umbilical inflammation, tympany or foreign body syndrome, intestinal obstruction or constipation, retention of urine, prolapse of rectum, myositis of pectoral muscle, myopathy, sprain of fetlock, punctured foot, fractures, hard milker, leaky teat, oedema between forelegs, blood in milk, ruptured eye ball, gangrenous tail, maggot wound, bleeding wound, pharyngitis/swelling at throat, dog bite wound, yoke gall, saddle gall, epistaxis, snake bite, mandibular fracture, wry neck / torticollis, cracked sole, paraplegia.

Firing was found as choicest EVT for swellings of joints and other parts which were chronic in nature. Firing was done in cases of torticollis, myopathy, paraplegia, upward fixation of patella, hock arthritis, ruptured eye ball, umbilical hernia or swelling, yoke gall, sprained fetlock, pharyngitis or throat swelling, myositis of pectoral muscle, corneal opacity, tympany, mandibular fracture, chest pad injuries and prolapse of rectum. The unconventional treatments recorded were use of paste of grounded powder of white stone in water, ash of burnt hedge hog with sesame oil, ash of burnt human bone with cow's butter, smearing kerosene on nose and back, desert soil of sand dune and grounded brick powder, powder of horn of deer stag with lead oxide, petrol or Kapoor ki Goli (Phenophthelin) swabs of kerosene, automobile engine oil (used), burning maggots with hot iron, country made liquor, human urine, opium solution, ash of a burnt cotton cloth, clay soaked in water, wooden splints, iron sheet splint, Khaprel (made up of baked clay), wet wood of ker tied with cloth, wet clay soil applied, ash and melathione powder (BHC), black powder of torch cell in sweat oil, self urine and sand, Kalamishora (potassium nitrate) 250 g in ½ kg curd for 3 days, splitting upper eyelid along with the palpebral border to remove small bead like structures and dress with sindoor, rubbing of tail end on hot iron, replacing bull nose ring by rope made up of Kheemp (*Leptadenia reticulate*) for 7 days, ivory powder 20-30 g for 1 month, tying up sacred thread in the name of Lord Hai Ram, Jhada, chanting hymens in the name of God, application of multani mitti (sand) and tying a 2-3 mm thick cotton thread close to the tip of teat.

In all the districts, the treatments of injury to soft palate and kumri in camels and snake bite in large ruminants and camels were not known to the traditional healers.The botanical names and medicinal properties or active principles of ethnobotanical agents were found out from the available literature and an attempt was made to ascertain the validity of various ethnoveterinary agents. The modern treatments of diverse surgical affections of large ruminants and camels were found out from the available books and were compared with respective EVTs. The validation of many non-conventional EVTs could not be ascertained. Some of agents of EVTs were found to be one of the ingredient of some marketed preparations of veterinary ayurveda in nature. The ethnoveterinary treatment of epistaxis and snake bite was also not known to the traditional healers at few places.

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The local and botanical names of various ethnobotanical agents recorded were Turmeric (*Curcuma longa*), Acra (*Calotropis procera*), Tobacco (*Nicotianum tabacum*), Chilli (*Capsicum annum*), Thor (*Euphorbia caducifolia*), Ajwain/Ajima (*Carum copticum*), Ginger (*Zingiber officinale*), Jowar (*Sorghum vulgare*), Til (*Sesamum indicum*), Kali mirch (*Piper nigrum*), Mehandi/henna (*Lawsonia inermis*), Heeng (*Ferula Asafetida*), Babool (*Acacia nilotica/arabica*), Lehsun (*Allium sativum*), Gwar Patha (*Aloe vera*), Neem (*Azadirachta indica*), Tumba/Bitter apple (*Citrullus colocynthis*), Bar (*Ficus benghalensis Linn*), Sharesh (*Albizia lebbeck* (*Linn*) *Benth*), Bhiloy seeds (not known), Aliya (not known), Jow (*Hordeum vulgare*), Arandi oil (*Ricinus communis L*), Ker (*Capparis decidura* (forsk) *pax*), Kheemp (*Leptadenia reticulate*, *L.pyrrotechnica*), Jaal (Salvadora oleadis), Roida (*Tecomella undulata*), Methi (*Trigonella foenumgaecum*), Chirmi (*Abrus precatorius Linn*), Sitafal (*Annona Squamosa Linn*), Laung (*Syzygium aromaticum* Linn.) Merr and Perry) Khakhara (*Butea monosperma* (Lamk)), Kutki (*Pricori jakiro*), Khumbhi/ mushroom (*Agaricus bispons*), Hukka bel (*Aristolochia bracteolata Lank*), Lemon (*Citrus medica*), Kela (*Musa indica*), Millet/ Bajra (*Pennisetum typhoides*, *P. americanum*), Rizka (*Trifolium pratanse*), Harad (*Terminallia chebul*), Hingota (*Balanites aegyptiaca* (Linn) *Delil*), Ajan (*Hardwickia binnata*), Ratan jot (*Jatrophacurcas*), Tutala bel/Jungali tori (not known) Kali saji (*Haloxylon recuruun*), Runkadi (*Striga euphrasoides*), Bajura (*Citrus maximus*), Sesmuli (*Raphamus sativus*), Naharkata/Safed Musli (Asperigus Racemosus) Khodilla (not known), Revant Dhosara (*Rhuem emodi*), Datura (*Dhatura alba, D. stramonium*), Kaner (*Nerium indicum*), Gangchi (*Grevia villosa*), Had jodi runkadi (*Cissus quadrangularis*), Kida biji runkadi (Not known), Meetha Neem (*Muraya koinagai*), Runkadi Damaso (*Indica percuria*), Kikar (*Acacia forneciana*) Gawar (*Cyamopsis tetragonoloba*), Tea leaves (*Ganellia thea*), Chanwla (*Amranthus viridus*), Pyaj (*Allium cepa*), Rai (*Brassica nigra*), Neelgiri (*Piper retrofractum*), Moth (*Vigina aconitifolia*), Pudina (*Mentha arvensis*), Kali Jiri (*Centratherum anthelminticum*) and Semala (*Bauhinia Semla*).

Some previous studies on camel pastoralists and camels in Rajasthan highlights the EVTs adopted by the traditional healers for camel diseases (Kohler Rollefson and Rathore, 1997; Kohler-Rollefson *et al*, 1996). Agab (1998) studied the traditional treatment methods of camels in eastern Sudan with emphasis on firing. Namanda (1998) reported that firing in the form of hot branding using iron bans or rocks is being used in many conditions of skin and joints in camels e.g. wry neck, deformed neck, weakness of muscles, abscesses, hernia, skin necrosis, wounds and navel ill. The EVTs employed in different countries have been elaborately described by Kohler Rollefson *et al* (2001).s

The diverse ethnoveterinary treatments of surgical affections of large ruminants and camels were divided into 3 categories based on employing ethnobotanical treatments, unconventional treatments e.g. use of engine oil, brake oil, ethnoanimal and ethnomineral agents and firing only. The medicinal properties of many of ethnobotanical agents were traced from the available literature. Few ethnobotanical agents were found to be an ingredient of modern ayurvedic formulation available in market. Most of the EVTs were in form of oral or topical applications. The validation of most of the ethnoveterinary agents was ascertained from the available literature and were compared with modern treatments also. Firing with various patterns was a treatment of choice for surgical affections involving swelling or the chronicity of condition including arthiritis. The scientific validation from the available literature could not be done for unconventional EVTs such as use of brake oil, engine oil, powder of torch cell etc. although, their efficacy was acclaimed high by the traditional healers.

References

Agab H (1998). Traditional treatment methods of camels in Eastern Sudan with emphasis of firing. Journal of Camel Practice and Research 5(1):161-164.

Köhler-Rollefson I, Rathore HS and Dewasi R (1996). The Camel Husbandry Improvement Project in Rajasthan (India) : Towards the Development of Extension Services for Camel Pastoralists. In: Carl – Hans Zessin (Ed.) Livestock Production and Disease in Tropics: Livestock Production and Human Welfare. Proceedings of the 8th International Conference of Institutions of Tropical Veterinary Medicine. p 591.

Köhler-Rollefson I and Rathore HS (1997). Raikas of Rajasthan. LISA : ILEIA. New Letter 13(2):36.

Köhler-Rollefson I, Mundy P and Mathias E (2001). A Manual of Camel Diseases. Traditional and modern health care for the dromedary. ITDG, Publishing, U.K., Ist Edn. ISBN 1 85339 503X.

Namanda AT (1998). Ethnoveterinary practice among the Gabbra nomadic pastoralists of Northern Kenya. Journal of Camel Practice and Research 5(2):305-308.