

#ABLATION

Weight Loss Surgery

There are a variety of factors that increased the odds of a participant having a change in relationship status post-weight loss surgery.



Single adults in the US who get weight-loss surgery are more than twice as likely to get married within five years, when compared to the general population.

Likewise, adults who are married and get bariatric surgery are more than twice as likely to get divorced, according to a new analysis.

The study is the first to characterize marital outcomes among US adults who underwent bariatric surgery, giving patients and doctors concrete data on changes in romantic relationships post-surgery.

"Weight loss is generally the goal of bariatric surgery, but people have a variety of motivators for wanting to lose weight—for example, remission of Type 2 diabetes and improvement in joint pain," says lead study author Wendy King, associate professor of epidemiology at the University of Pittsburgh Public Health.

"Patients have also described the desire for romantic partnership or improving relationships as important motivators. Before this study, we had no quantitative data in the US on how marital status changes after bariatric surgery are patients more likely to get married, divorced, find romantic stability?"

For the study in *Annals of Surgery* Open, King and her colleagues examined data on 1,441 US adults who between 2006 and 2009, underwent Roux-en-Y gastric bypass or sleeve gastrectomy, the two most common and effective surgical treatments for severe obesity. The participants ranged in age from 19 to 75 years old and 79% were women. At the time of surgery, 62% were married or living with a partner while the rest were separated, divorced, widowed or had always been single.

The participants were enrolled in the National Institutes of Health-funded Longitudinal Assessment of Bariatric Surgery-2 (LABS-2), a prospective, cohort study of patients undergoing weight-loss surgery in the US.

Consistent with previous studies in Scandinavia, the vast majority of the LABS-2 participants maintained their relationship status for the five years they were followed after surgery. 81% of married participants staying married and 70% of always-single participants staying single.

But 18% of unmarried participants got married, compared to 7% of the general US population; and 8% of mar-

ried participants got divorced, compared to 4% of the general population. An additional 5% of married participants who did not get divorced got separated.

There were a variety of factors that increased the odds of a participant having a change in relationship status post-surgery, King notes. Some were expected: Younger participants and those living with a partner before surgery were more likely to get married throughout the following five years. But some were more surprising. For example, the amount of weight lost was not associated with whether someone got married but improved physical health was.

However, weight loss did matter when it came to separation and divorce: Participants who lost more weight were more likely to get separated or divorced as were those who reported an increase in sexual desire post-surgery.

"This could indicate that a patient's changing lifestyle post-surgery put them out of sync with their spouse," King says. "It can be really hard when one spouse changes what they eat and how active they are and desires more sexual activity while the other doesn't. That can put significant strain on a marriage. It may be important for couples to consider this and have strategies to maintain their connection after surgery."

King notes that the LABS-2 study did not ask participants whether a desire to change their romantic relationship status was among their motivations for getting bariatric surgery, so the team could not determine if the participants who got married or divorced went into surgery hoping for a change.

"Our relationships with others particularly lifelong partners have been shown to have a profound impact on our health, both physical and mental," says King. "It will be important for future studies to disentangle the directionality of the various associations between bariatric surgery and relationship status that we uncovered in this study so doctors can best counsel their patients and manage expectations before and after surgery."

Amanda S. Hinerman and Gretchen E. White, both PhDs at the University of Pittsburgh, are co-authors of the study. No funding was provided for this specific analysis, but LABS-2 received funding through a cooperative agreement with the National Institute of Diabetes and Digestive Kidney Diseases.



Al-Biruni's description is remarkably accurate, but Ibn-Battuta has allowed his fancy to take hold of his observations when he says that the head of a rhinoceros is bigger than that of an elephant. He does not mention the locality where the king hunted but it could be the environs of present-day Delhi. We have yet another interesting notice of the rhinoceros, this one dating to 1387-1388 from Prince Muhammad Khan, son and successor of Sultan Firuz Shah Tughluq. He marched towards the Sirmaur hills 'and there spent two months, hunting rhinoceros and elk (deer)'. The locality is the Himalayan foothills in the southeast of the present-day Himachal Pradesh.



Divyabhanusinh
Ex India head for WWF. A renowned wildlife expert

#CLASSIFICATION

The gairda is an animal which to a general observer looks like a creature left over from a long bygone era. The male animal is somewhat bigger than the female. The height of the animal is 175 to 200 cm, and it weighs around 2,000 kg. To quote Eric Dinerstein: "The legs have deep scars on anal folds; the extra skin is known as epidermal knobs; cuts on the ears, and missing tail tips. Body colour is grey and mosaic like pattern on the skin is quite noticeable on the rump."

The most important point for our story is its horn which is without a bony core and contains tiny keratin tubes dispersed in a keratinous matrix, growing over its nose. Rowland Ward's of Big Game has catalogued 23 horns of more than 11 inches (28 cm), the longest recorded being 24 inches (61 cm). Having written all this, one must accept the fact that the animal defies description and it has to be seen to fully appreciate its prehistoric appearance.

The Indian species of the rhinoceros is primarily a grazer. It inhabits today the protected areas along the large riverine tracts along the Himalayan mountain

range. It lives amidst the tallest grass in the world popularly called elephant grass because of its height. Today, the most famous abode of the greater one-horned rhinoceros is the Kaziranga National Park along the Brahmaputra river system in Assam. The environs of oxbow lakes and other water bodies are its favourite feeding and wallowing grounds.

During the monsoon though when Kaziranga gets waterlogged, the rhinos move into the adjoining hills returning to Kaziranga as the waters recede. The males are territorial, marking their area with urine and dung and charging aggressively at male intruders. The females carry their young for 16 months and their calves remain with them for three to four years.

While history writing on the environment came into its own in the second half of the 20th century, few works have focused on the history of human interaction with a particular species. From Europe, the mastery work of Michel Pastoureau comes to mind. He chronicled the European brown bear's unfortunate brush with humanity leading to its near extinction there. From Japan, Brett L. Walker wrote the story of the extinction of the wolf; and Andrew C. Iseberg chronicled the story of the near extinction and resurrection of the iconic bison by the white man in



Telling the Story of our Gairda

The Unicorn (...2)

America. In India we are not far behind. The ubiquitous goose's presence in art and literature has been chronicled by Jean Philippe Bogel and the peacock has found a biographer in P. Thankappan Nair. Coming to animals the cheetah, the lion and the elephant have been chronicled extensively. Several tomes have been written on the charismatic tiger, yet it awaits a serious biographer. So do India's unicorn and our story proposes to fill this gap.

To flesh out information on human-animal interaction through the ages is a task which involves meandering through a variety of sources from different time periods. Some animals being iconic, like the lion and the elephant in Asia and Africa or the brown bear in Europe, are found to be fairly common in various

sources. The rhinoceros on the other hand though a very noticeable large mammal is not quite in the same league. The Brahmins have the privilege of eating the flesh of the gairda. I have myself witnessed how an elephant coming across a young gairda was attacked by it. The gairda wounded the elephant's forefoot with its horn, and threw it down on its face."

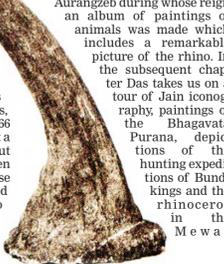
Three centuries later we have Muhammad Ibn Battuta from Tangier, who travelled to India and lived in the country from 1332 onwards. He saw India first had next ten decades until 1353. He too was fascinated by the rhinoceros and has left a detailed description of the creature: "After crossing the river Sind (in the land) called Ban Jab (Punjab) we entered a forest of reeds --- when we were confronted by a rhinoceros. In appearance it is a black animal with a huge body and a disproportionately large head. For this reason it has become the subject of a proverb, as the saying goes Al-karkaddan ras bilia badan (rhinoceros, head and no torso). It is smaller than an elephant but its head is many times larger than the elephant's. It has a single horn between its eyes, about three cubits in length (54-66 inches, i.e. 137-167 cm) and about a span in breadth. When it came out against us one of the horsemen in its way, it struck the horse... pierced his thigh and knocked him down; then went back into the thicket and we could not get at it. I saw a rhinoceros a second time on this road after the hour of afternoon prayer. It was feeding on plants but when we approached it ran away. I saw a rhinoceros yet another time when in the company of the King of India (Ghiyas-ud-Din

Muhammad Shah I Tughluq) we had entered a jungle of reeds. The Sultan was mounted on an elephant and we too were mounted on elephant along with him. The foot soldiers and horsemen went in and beat it up, killed it and conveyed its head to the camp (mahalla)."

The Observations Al-Biruni's description is remarkably accurate, but Ibn Battuta has allowed his fancy to take hold of his observations when he says that the head of a rhinoceros is bigger than that of an elephant. He does not mention the locality where the king hunted but it could be the environs of present day Delhi. We have yet another interesting notice of the rhinoceros, this one dating to 1387-1388 from Prince Muhammad Khan, son and successor of Sultan Firuz Shah Tughluq. He marched towards the Sirmaur hills 'and there spent two months, hunting rhinoceros and elk (deer)'. The locality is the Himalayan foothills in the southeast of present day Himachal Pradesh.

With the establishment of the Mughals in Hindustan, a whole new window opens up to give us a glimpse of the life and times of the rhinoceros. Biological of the great Mughal emperors and the autobiography of Jahangir, detailed chronicles of the administration of the empire, the history of the house of Timur; translations of the great epics Mahabharata and Ramayana from Sanskrit into Persian, all provide a plethora of sources to examine. In addition to literary materials the profusion of paintings suddenly gives us an ocular record hitherto unparalleled.

Ashok Kumar Das examines these sources in Chapter 4, to record the rhinoceros's brush with the empire from the arrival of Babur in 1526 through Akbar's and Jahangir's shikar to Aurangzeb during whose reign an album of paintings of animals was made which includes a remarkable picture of the rhino. In the subsequent chapter Das takes us on a tour of Jain iconography paintings of the Bhagavata Purana, depictions of the hunting expeditions of Bundi kings and the rhinoceros in the Mewar



A record horn of the greater one-horned rhinoceros in the Natural History Museum, London. Its length is not mentioned, but the longest that have recorded is 24 inches (61 cm). From Dollman and Burice, 1935.

School of painting. Though the animal did not exist in Rajasthan at the time, the Bundi kings may well have hunted them elsewhere, and the Mewar paintings are tantalizing. Das presents a variety of sources from Jean-Baptist Joseph Gentil's album, which records the Nawab of Avadh's rhinoceros hunt near Bahraich (present day Uttar Pradesh) in the late 18th century, Thomas Daniell's exquisite rendering of the unicorn from the foothills of the Himalaya, the rhinoceros at the Peshwa's court at Pune for the Portuguese rhino-horn artefacts and a temple relief in Murshidabad, West Bengal. These sources go further to establish the animal's existence in fair numbers in its range up to the beginning of the 18th century apart from creating a firm niche for its presence in the cultural world of the period.

Before we come to the British period a short diversion to make note of the rhinoceros's arrival in Europe is worth taking here. We have seen earlier that there was a huge misconception of the unicorn in the ancient world of Greece and Rome. It appears that no accurate descriptions of the rhinoceros were available in Europe even in the 16th century, as is testified by the rhinoceros drawn by Albrecht Durer in 1515. He endowed the animal with a small horn protruding from between its shoulder blades, apart from a very stylized body.

A British Surgeon, John Fleming, who was the President of Bengal Medical Service in 1800, assembled albums of over 200 natural history studies of local fauna by European and Indian artists. Notable for our context is a study of a young Indian rhinoceros by Robert Home (c. 1799).

In 1581 a living specimen brought from India by the Portuguese was presented to King Philip II of Spain and came to be known as the Madrid rhinoceros. In 1684, an engraving by Francis Barlow claimed to be a true representation of a fight between a rhinoceros and elephant, the rhino having been 'lately brought over from the East Indies to London'. However, the rhinoceros here is suspiciously similar to Durer's though without the horn on its back, Durer's depiction also seems to be the inspiration for the 20th century Bengal school artist Nandalal Bose in his stylized linecut illustration of circa 1930.

In 1741, a Dutch sea captain, Douwemont Van der Meer bought young Clara, a female rhinoceros from JA Sichterman, a Director of the Dutch East India Company in Calcutta. The travails of this poor creature need not be detailed here, except to say



The 'Dutch Rhino': This is an accurate rendering of Clara at rest by the German Painter Johann Elias Ridinger (1698-1767), dated 1748. Courtesy The Samuel Courtauld Trust, The Courtauld Gallery, London.

As early as 1684, Captain Henry Udall brought a rhino to London on his ship. It was from the Court of the King of Gulkindall, Le-Golconda. A second one reached London in 1739. One rhino arrived in France in 1770 and another landed in London in 1790 known as the 'Stubbs' rhinoceros since it was painted that same year by the famous artist George Stubbs and yet another was brought to London in 1799. Many more were to follow.

The fate of these animals has been meticulously recorded in detail by TH Clarke. They were curiosities in 18th century Europe where the memory of the Ancient Roman games that had included African and possibly Indian rhinoceroses had long faded. These animals were objects of wonder kept in the menageries of kings and potentates and made a remarkable impression in European art, tapestries, porcelain and clocks. Some of them travelled from one city to another being exhibited and earning handsome amounts for their owners.

However, important as these sojourns of India's unicorns were to European art and culture, they had little to contribute to the animal's interaction with man in its own homeland. These unfortunate animals had to face captivity, voyage through choppy oceans and life in captivity in an alien environment but what is relevant here is the rather accurate renderings of them by European artists as mentioned above.

Concluded. | | | writeoarbit@rashradoot.com

Coming back to our story of the unicorn in India, Chapter 6 on the British period and beyond traces the travails of the animal which had all but disappeared from its former range except for some area in the eastern most area of the subcontinent where it precariously hung on to existence near extinction. A British Surgeon, John Fleming, who was the President of Bengal Medical Service in 1800, assembled albums of over 200 natural history studies of local fauna by European and Indian artists. Notable for our context is a study of a young Indian rhinoceros by Robert Home (c. 1799). However, as in the Mughal period most of the images from this time relate the hunting. We give an account of the relentless shikar in colonial times, and later conservation efforts by the British Indian government and the government of independent India which led to the successful stabilization of its population and the increase in its numbers from less than 200 around 1900 to a total population of more than 3,500 between Nepal and India in the 21st century.

The final chapter examines the continuing efforts at conservation up to the present time including translation of the animal within its former range. It also examines some aspects of the most serious threats to its existence caused largely by the demand for its horn which is believed to have medicinal value. India's unicorn still lives on the brink, notwithstanding its successful conservation that appears to have made its survival secure for the moment.

Concluded. | | | writeoarbit@rashradoot.com

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#MEDICAMENT

Ovarian Cancer Risk Lowered

Earlier studies have found medicines used to treat other diseases may be useful in preventing cancer prompting this investigation into bisphosphonates.



medication used to prevent bone loss may help lower the risk of ovarian cancer, according to a new study.

Researchers compared medications taken by more than 50,000 women over the age of 50, using de-identified medical records from 2004-2013, to analyse differences in those with ovarian cancer and those without.

Women who used nitrogen based bisphosphonates were found to be less likely to develop ovarian cancer, says Karen Tuesley, a PhD candidate at the University of Queensland School of Public Health.

"The findings varied between ovarian cancer subtypes and included a 50% lower risk for endometrioid cancers and 16% for serous ovarian cancers."

"We don't yet know why these medicines may lower the risk of ovarian cancer in women but previous studies have shown that nitrogen based bisphosphonates can stop the disease spreading in laboratory grown cells.

In 2021, there were 1,720 cases of ovarian cancer diagnosed and 83% of these occurred in women aged over 50 years, according to the Australian Institute of Health and Welfare.

More than 200,000 Australians are prescribed bisphosphonates containing nitrogen each year making them one of the most prescribed medicines of their type in the country. The medicines prevent bone loss and help reduce fractures in osteoporosis patients.

"This study is important because most known risk factors for ovarian cancer cannot be easily modified, says Susan Jordan, associate professor in the School of Public Health. "Earlier studies have found medicines used to treat other diseases may be useful in preventing cancer prompting this investigation into bisphosphonates," Jordan says.

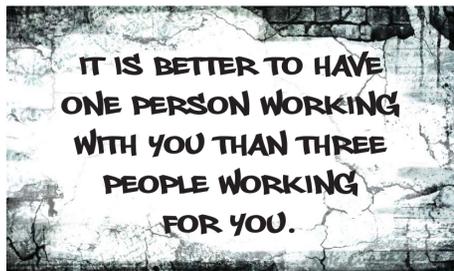
"Further research is needed to understand why these medicines might affect ovarian cancer subtypes differently. We know ovarian cancer subtypes look different under the microscope and have unique risk factors."

"However, it is important to look at each subtype separately to improve our knowledge and understanding of these cancers. This study may help inform medicine choice for women with osteoporosis and suggest areas for further research to better understand how ovarian cancer develops."



By Jerry Scott & Jim Borgman

THE WALL



BABY BLUES



By Rick Kirkman & Jerry Scott

ZITS

