Health

'Tattoos stigma falling away'

Surgeons 'discuss' options when surgery risks too high

KUWAIT CITY, July 29, (Agencies): In an essay published July 26 in The New England Journal of Medicine, Ira Leeds, MD, research fellow, and David Efron, MD, professor of surgery, both of the Johns Hopkins University School of Medicine, along with their collaborator, Lisa Lehmann, MD, PhD, MSc, from the US Department of Veterans Affairs, call for shared decision making when a patient's risks for surgical complications may outweigh the potential benefits of an operation.

"Ethical use of health care resources, surgeon ability and experience, and patient wishes all come into play when risk factors known to predict poorer surgical outcomes are present, including obesity, smoking, diabetes and age," says Leeds. "Our essay highlights the realities for both surgeons and patients at a time of increasing focus on transparency, high value care, public reporting of clinical outcomes, and accountability, along with patient suffering in making decisions to operate or not operate."

In the essay, the authors acknowledge that surgeons now not only must consider how poor outcomes might affect the patient, but also how those outcomes may affect their personal and institutional quality rankings, which are not only increasingly available for public scrutiny but also are tied to payments by insurance companies and Medicare/Medicaid.

Inherently, Leeds says, there is an ethical concern with cherry-picking one's way to better surgical outcomes. By current quality measures, selecting the healthiest patients for operation is an easy way to improve one's outcomes. However, surgeons are ethically obligated to center their decision-making on the patient. For sick and debilitated patients, deferring surgery may be help them in the long run, but for others, deferring surgery may be ethically unbalanced, favoring the institution or society as a whole over the suffering of the individual.

Among the options and decision points that require consideration from surgeons and patients, says Efron, are when and for how long to delay surgery until risk factors can be modified, and when risk factor modification should be abandoned in the interest of alleviating a patient's surgically correctable conditions — even when risky.

In the essay, Leeds and Efron also consider the fair allocation of limited health care resources as a factor in risk assessment. For example, is it wiser to perform one high-risk surgery or two average-risk surgeries that use the same level of health care resources? A recent analysis, the authors note, showed that obesity increased the cost of a hospitalization for a person undergoing cardiac surgery by 17.2 percent on average, or $426 for each unit of body mass index. Should such cost analyses be part of the decision to operate or not operate? And importantly, who should make these assessments? The authors argue that the proximity of operating surgeons and patients to the decision's consequences requires more involvement from professional societies and other impartial third parties.

The root of conflict in the surgical selection process, Leeds and Efron argue, lies in a misalignment of goals of patients, surgeons and society. More effective shared decision making, with clear communication to patients about surgical risks and responsibilities, concrete guidelines for operating from professional societies, and consistent support from insurance companies would help align the goals.

Also:

NEW YORK: Patients don't see a difference in competence, professionalism or trustworthiness when doctors sport tattoos or piercings, a small **US** study suggests.

Perceptions have likely changed over time as societal norms regarding tattoos and piercings have changed, too, the researchers write in Emergency Medicine Journal.

"Tattoos are more prevalent now than they were 10 years ago, professionals included," said co-author **Dr Holly Stankewicz** of St Luke's University Health Network in Bethlehem, Pennsylvania.

"The stigmas are falling away, and we think that's a good thing," she said in a phone interview. "Patients know it doesn't affect how professional or qualified you are."

Stankewicz and colleagues surveyed patients in a Level I community trauma center in the third largest urban area of Pennsylvania. Seven doctors — four men and three women — wore standard navy blue scrubs during the study and rotated between four conditions: being "clean" (without tattoos or piercings), "pierced" (a hoop earring for men or a fake nasal stud for women), "tattooed" (a temporary black tribal tattoo around the upper arm), or both tattooed and pierced.

In a new essay, Hopkins surgeons consider the multiple ethical concerns in selecting patients with certain risk factors for surgery. — Credit: iStock

FDA declines to OK Insys Therapeutics opioid painkiller

Drug reverses hair loss, skin damage

KUWAIT CITY, July 29, (Agencies): In a series of experiments with mice, Johns Hopkins investigators have used an experimental compound to successfully reverse hair loss, hair whitening and skin inflammation linked by previous studies to human diets heavy in fat and cholesterol.

The investigators say the compound halts the production of certain fats called glycosphingolipids, or GSLs, that are major components of skin and other cell membranes. Current research shows that mice fed a diet high in fat and cholesterol are more likely to have hair discoloration from black to gray to white, extensive hair loss and inflammation of skin exhibited by multiple wounds. Feeding these animals the compound, however, appears to reverse such symptoms.

The Hopkins investigators caution that such results in mice do not mean that the same effects would occur in people, and there is no evidence at this time that the compounds they used would be safe in people. But the findings, they say, do shed light on possible pathways for addressing hair loss and skin wounds in humans with oral or topical medications.

A report on the findings was published July 30 in Scientific Reports.

"Further research is needed, but our findings show promise for someday using the drug we developed for skin diseases such as psoriasis, and wounds resulting from diabetes or plastic surgery," says Subroto Chatterjee, PhD, MS, MSc, professor of pediatrics and medicine at the Johns Hopkins University School of Medicine. Chatterjee conducts research as part of Johns Hopkins Children's Center.

More specifically, previous studies showed that GSLs are prevalent in the cells that make up the uppermost layer of the skin, as well as in cells called keratinocytes that help regulate pigmentation of the eyes, skin and hair.

To determine how disrupting GSLs might affect skin appearance and color, and whether treatment with D-threo-1-phenyl-2-decanoylamino-3-morpholino-1-propanol (D-PDMP) — a man-made compound that halts GSL production — would reverse any negative effects, Chatterjee and his colleagues first genetically modified a group of mice to have atherosclerosis, a disease in which arteries are clogged by fat deposits.

The researchers then fed one group of these mice a Western diet high in fat and cholesterol, and a second group standard chow. All mice were fed their assigned diets from 12 weeks of age to 20 weeks.

Compared to those fed standard chow, the mice that ate a Western diet lost hair, formed skin lesions and suffered from hair whitening. These results became more severe when the mice continued eating a Western diet for 36 weeks, with 75 percent of the mice having skin, hair loss and multiple skin lesions.

From 20 to 36 weeks of age, mice in both groups were given varying amounts of D-PDMP, either in a capsule or as a liquid, while they ate the same diet. Mice that received 1 milligram and 10 milligrams of D-PDMP in a capsule per kilogram of body weight from 20 to 36 weeks while eating a Western diet started regaining hair and hair color, and their skin inflammation lessened. Treatment with 1 milligram of D-PDMP in a capsule per kilogram of body weight was as effective as 10 milligrams per kilogram as a liquid. This suggests that an encapsulated form of D-PDMP is a better method of drug delivery.

The research team then looked at the skin of the mice's under a microscope and found that mice eating the Western diet experienced an infiltration of neutrophils, a type of white blood cell implicated in inflammation, in various skin areas. Treatment with D-PDMP in a capsule significantly reduced the number of neutrophils, implying reduced skin inflammation and wounding.

Next, the researchers used mass spectrometry analysis, a method of identifying and quantifying the chemical composition of a mixture, to determine ceramide, glucosylceramide and lactosylceramide levels in the mice. Ceramides are a type of lipid, or fat, that helps protect the skin's moisture, and glucosylceramide is the first derivative of ceramide, whereas lactosylceramide, a later derivative of ceramide, activates inflammation.

Compared to mice fed normal chow, those fed a Western diet had decreased total ceramide levels, decreased glucosylceramide and nearly three times more lactosylceramide. Treatment with 1 milligram of D-PDMP in a capsule per kilogram of body weight or 10 milligrams of D-PDMP as a liquid per kilogram of body weight, however, noticeably increased ceramide levels to normal.

"Our findings show that a Western diet causes hair loss, hair whitening and skin inflammation in mice, and we believe a similar process occurs in men who lose hair and experience hair whitening when they eat a diet high in fat and cholesterol," says Chatterjee.

Also:

NEW YORK: Insys Therapeutics Inc said on Friday the **US** Food and Drug Administration declined to approve its opioid painkiller, citing potential safety concerns.

Insys shares slid nearly 9 percent to $6.62 on Friday, hitting their lowest level in more than two months.

Insys' treatment is an under-the-tongue spray formulation of the opioid buprenorphine that was under review to treat moderate-to-severe pain.

The company said the so-called complete response letter indicated that some of the data suggested potential safety concerns although the spray demonstrated statistically significantly pain relief compared to placebo.

In May, an advisory committee to the FDA voted against the approval of the treatment.