Eczema: Best moisturiser for kids is the one they will use, study concludes

ISLAMABAD: Eczema refers to a spectrum of noncontagious skin conditions that trigger itchiness, inflammation, and discomfort. It typically develops in the first year of lifeTrusted Source.

Atopic dermatitis is the most common type that affects up to 20% of children.

Moisturizers, also known as emollients, may help treat symptoms, act as barriers to irritants, and reduce inflammation. These products are recommended or prescribed for soothing skin and preventing flare-ups, along with anti-inflammatories such as topical corticosteroids. Research showing which moisturizer is best for eczema in children has been extremely limited. A trial in the United Kingdom is thought to be the first of its kind to compare the effectiveness of four main types of moisturizers: lotions, ointments, creams, and gels.

Dr. Matthew Ridd, the study lead from the Centre for Academic Primary Care at the University of Bristol in the U.K., says: "A study of this type has been long overdue […]. Our findings challenge conventions about how often moisturizers need to be applied, which types are less likely to cause problems and which patients should be recommended certain types […]."

Dr. Ridd and fellow researchers searched electronic medical records, then they screened and invited the parents or guardians of "potentially eligible children" to take part in their trial. After assessing over 12,000 children, 550 participated. The children were aged between 6 months and 12 years. Subjects were randomly assigned to use one of the four types of emollients. The children's family doctor prescribed the moisturizers with directions to "apply twice daily and as required." Parents reported their observations weekly for 16 weeks and followed up every four weeks until 52 weeks.

The researchers discovered that no emollient type stood out as more effective. Medical News Today discussed this research with Dr. Tien Nguyen, dermatologist at MemorialCare Orange Coast Medical Center in Fountain Valley, CA. He was not involved in this study. Dr. Nguyen felt that the study's sample size of 550 was "not a huge number, but adequate."

He also agreed that the patient's preference is a key consideration for treating eczema. However, he said that the effectiveness of emollients "depends on the location of the skin on the body [and] the severity of the disease." For instance, he explained, that the palms, feet, and soles typically respond well to ointments. On the other hand, creamy or lotion moisturizers might work better on the eyelids, upper lip, or neck.

MNT also discussed this study with Dr. Teo Soleymani, dermatologist and surgeon at UCLA Health. He was not involved in this research. Dr. Soleymani praised the study for its "real-world application." However, he was disappointed that the study's population mostly had the same white race:

"I think, in this group, the reason there was no significant difference […] is probably that all of these patients have the same skin type and same subtype of eczema." He insisted that this is significant because "patients with different skin types, for example, Asian skin or African American skinTrusted Source, who have eczema, tend to have different etiologies to their eczema." The dermatologist pointed out three main components of eczema:

- "a genetic barrier defect of the skin;
- hypersensitivity or immune overactivity to environmental allergens that get through the cracks in the skin; and
- an imbalance in the bacteria that live on our skin."

Dr. Soleymani explained that eczema in Asian or African American skin tends to result from a genetic barrier defect known as filaggrin mutations. Subsequently, the skin becomes drier, ashier, and itchier, and it develops a rash.

These skin types typically "need something that's greasier […], great barrier protection for those kids compared to ointments," the dermatologist said.

The dermatologist pointed out that patients with inflammatory eczema don't have dry skin. Instead, "their skin is super sensitive, so everything makes them red and irritated. These individuals require different treatments." Dr. Ridd and his team say that more studies are necessary to see if their findings apply to teens and adults with eczema or other dry skin issues. Dr. Soleymani maintained that baby skin and elderly skin are similar, so his young and much older patients receive the same treatment recommendations. The experts all agree, though, that the patient — not the health care provider — should use what works best to treat their eczema. **—Online**

People with rare diseases have poor health related quality of life: study

ISLAMABAD: People with rare diseases frequently wait years for a proper diagnosis, have to travel long distances for specialty care and face high out-of-pocket health care expenses, a recent Oregon State University study found.

This combination of challenges in accessing appropriate medical care leads to poor health-related quality of life, low patient satisfaction and high levels of anxiety, depression and stigma, the study concluded. A major factor in addressing these challenges is the ongoing education of medical professionals, said Kathleen Bogart, one of the lead authors and an associate professor of psychology at OSU.

"A really important area of intervention is ensuring that health care providers have a general knowledge of rare diseases," Bogart said. "We're not expecting them to know all 7,000 of them, but we're expecting them to know some of what the clues are that you're not dealing with a prevalent condition or a condition that's easily diagnosed." If a doctor sees a patient who has been seeking a diagnosis for years with no success, that ought to trigger a different approach, she said — rather than the doctor sending the patient home with the conclusion that nothing can be done to help them. According to the National Institutes of Health, a disease qualifies as "rare" if there are fewer than 200,000 cases of it in the U.S. The NIH lists approximately 7,000 diseases that meet this qualification, and though each disease is rare on its own, in total they affect approximately 1 in 10 Americans.

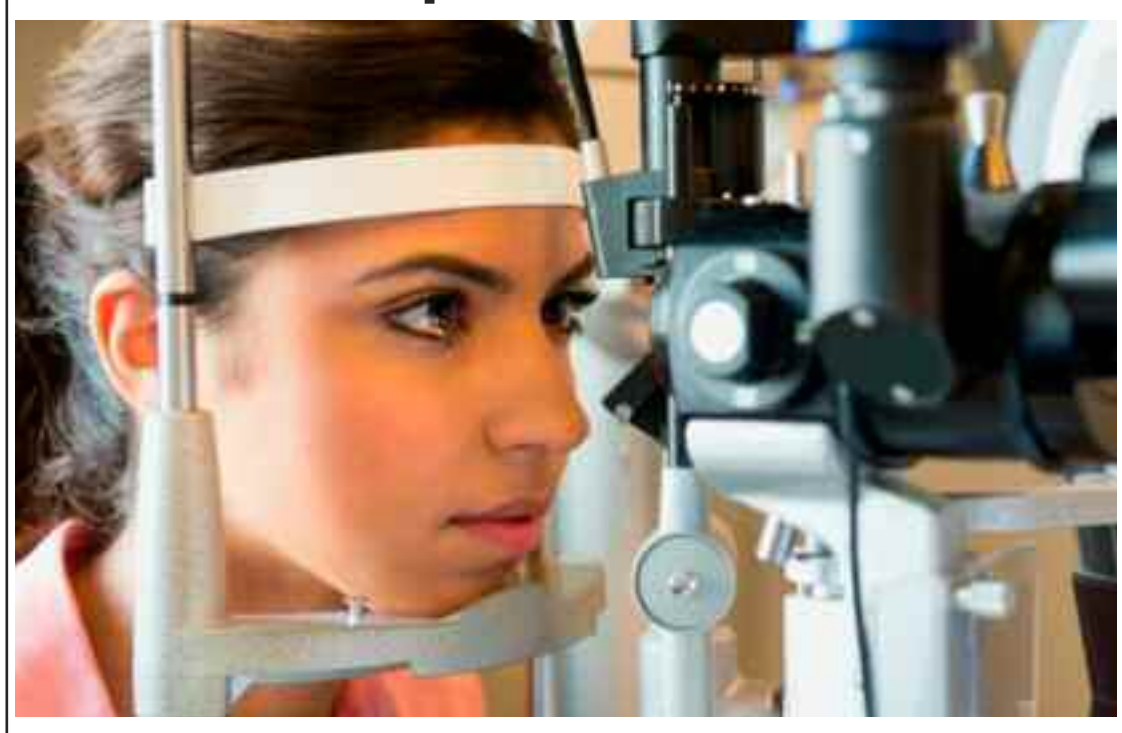
For the study, researchers surveyed 1,128 patients with rare diseases and parents of children with rare diseases from across the country. Participants answered questions about their process of receiving a diagnosis, how informed they felt their medical providers were, their own knowledge about their disease, their insurance coverage, whether they felt adequately supported in their daily lives and what kind of stigma they experienced. Researchers also included a questionnaire to assess patients' health-related quality of life, asking about physical function, fatigue, depression, anxiety, sleep, pain and ability to participate in daily activities.

Time between onset of symptoms and diagnosis was one of the most striking results: 16% of people waited 10 or more years to get an accurate diagnosis, while 17% waited between four and nine years.

Participants also reported having to see multiple providers to secure that diagnosis: 38% saw two or three providers, 24% saw four or five providers and 5% saw more than 15 providers before being diagnosed. Nearly half reported traveling more than 60 miles to receive care for their rare disease.

Patients generally had much lower ratings for their initial provider than for the provider who was able to correctly diagnose them, often reporting that they didn't feel their initial provider was willing to research different possible diseases or to ask other providers for help in diagnosing. **—Online**

New eye exam may be able to predict a heart attack



New research has identified a link between vascular complexity in the eye's retina and the risk of having a myocardial infarction, or in other words, a heart attack. The discovery was made by using artificial intelligence and "deep learning" to process data representing a large group of individuals.

Combined with new genetic insights, the researchers can accurately predict heart attacks when the model includes demographic data. Soon, retinal scans may be able to predict heart attacks. New research has found that decreased complexity in the blood vessels at the back of the retina in the human eye is an early biomarker for myocardial infarction.

"For decades, I've always lectured that the eye is not just the window to the soul, but the window to the brain and the window to the body as well," said ophthalmologist Dr. Howard R. Krauss, speaking to Medical News Today about the new research. "AI [artificial intelligence] plus 'deep learning' is proving that to be the case," he said. Cardiologist Dr. Rigved Tadwalkar, who was not involved in the research, told MNT that the findings were interesting. "[A]lthough we have known that examination of retinal vasculature can produce insights on cardiovascular health, this study contributes to the evidence base that characteristics of the retinal vasculature can be used for individual risk prediction for myocardial infarction," he said.

"This [study] representsanother tool in the toolbox to help determine who could potentially benefit from earlier preventative intervention [when it comes to heart attacks]." The greatest appeal," said Dr. Krauss, who was also not involved in the study, "is that the photography station may be remote to the clinician, and perhaps, someday, even accessible via a smartphone." The research was presented on June 12 at the European Society of Human Genetics. Get our cholesterol micro-lessons to support you in making lasting lifestyle changes to manage your cholesterol levels. Our experts have gathered cholesterol-lowering tips into free weekly 5-min lessons.

Early Alzheimer's diagnosis possible in a single MRI scan using new algorithm: Alzheimer's disease is the most common form of dementia, affecting around 70% of people with dementia, but Alzheimer's disease can be challenging to diagnose. Doctors currently use multiple cognitive tests and scans to diagnose Alzheimer's, which can take a long time. Researchers have developed an algorithm to be used with a single brain MRI scan to rapidly detect early signs of Alzheimer's. In their trial, the system detected 98% of cases of Alzheimer's disease. Dementia is, according to the World Health Organization, the seventh leading causeTrusted Source of death worldwide. The most common form, affecting up to 70%Trusted Source of those with a dementia diagnosis, is Alzheimer's disease.

People with suspected Alzheimer's usually undergo multiple tests to diagnose the condition. During the assessment, the person will: Give their medical history, both physical and mental. Undergo a medical examination.Undergo a neurological examination to test reflexes, speech and coordination. Take several cognitive tests to assess memory, thinking and simple problem-solving. Have a magnetic resonance imaging (MRI)Trusted Source or CT scan to look for any changes in the brain,

2-3 cups of coffee a day may reduce kidney injury risk by 23pc

LONDON: Drinking coffee has been linked to many health benefits. Dejan Beokovic/StocksyResearchers have investigated the effects of coffee intake on acute kidney injury risk.

They found that drinking any amount of coffee reduces the risk of acute kidney injury but that 2-3 cups per day is most beneficial.They say that further research is needed to understand why this link may exist.

CoffeeTrusted Source contains many beneficial compounds for health, including caffeine, diterpenes, and chlorogenic acid.StudiesTrusted Source show that habitual coffee consumption is linked to the prevention of chronic and degenerative conditions, including cancer, cardiovascular disorders, diabetes, and Parkinson's disease.

Caffeine, the most commonly studied compound in coffee, exerts positive effects on kidney function, and daily coffee consumption is linked to a lower risk of chronic kidney disease. Although other compounds in coffee are less studied, compounds such as chlorogenic acid and trigonelline are known to reduce generalized inflammation and oxidative stress. Knowing more about how coffee consumption affects the incidence of other kidney-related conditions could help policymakers take steps to reduce people's risk of developing progressive kidney disease. Recently, researchers investigated the effects of coffee consumption on acute kidney injury (AKI), when the kidneys lose all or part of their function suddenly. AKI represents a public health problem with around 0.25% of the general population experiencing AKI, which rises to 18% among individuals who are hospitalized annually. From their analysis, the researchers found that higher coffee intake is linked to a lower risk of incident AKI. The study was published in Kidney International Reports.The most beneficial amount of coffee For the study, the researchers used data from 14,207 adults ages 45 – 64 from the Atherosclerosis Risk in Communities (ARIC) studyTrusted Source.

The researchers assessed the participants' coffee consumption during their first visit via a food frequency questionnaire. In total, they found:27% never drank coffee 14% drank less than a cup of coffee per day19% drank 1 cup per day 23% drank 2-3 cups per day 17% drank more than 3 cups per day To define acute kidney injury, the researchers looked at rates of hospitalization, including an International Classification of Diseases code indicating AKI throughout a median period of 24 years follow-up. They noted 1,694 cases of incident AKI during the follow-up period.