Biomedicine

Real-life soap

Some British television viewers evidently take their soap operas too close to heart. After Angie, a character on a BBC soap called "Eastenders," deliberately took an overdose of pills (apparently to gain her husband's attention), self-poisoning cases at University Hospital in Nottingham went up from an average of 23 a week to 43, three scientists report in the April 12 Lancet. At Hackney Hospital in London, the number of people with overdoses a week after Angie's exploit was 22, more than triple the 7-a-week average for the preceding 10 weeks, Simon J. Ellis and Susan Walsh report in the March 22 Lancet.

Because of the ensuing rush on hospital beds, Hackney Hospital, located in the east part of London where the soap opera supposedly takes place, had to cancel routine admissions. (A correspondent from Northampton General Hospital, north of London, reported that no increase was seen there.) Ellis and Walsh suggest wryly that Angie's next overdose be timed for a period when hospital beds are not so scarce.

As for Angie, she was released from the hospital the same day she was admitted, and was apparently feeling well. Her wayward husband, the Nottingham researchers note, "appeared to be more in tow."

The flowers that bloom in the spring

Spring may bring birthdays to allergy sufferers as well as sneezing and runny noses. According to a report by three Italian physicians in the April ANNALS OF ALLERGY, people allergic to pollen are more likely to have been born during grass pollen season than are people with allergies to other substances.

They studied people in the Turin area who were known to be prone to allergies – 207 people with pollinosis (better known in the United States as hay fever) and 97 with house dust allergies – and found a statistically significant association between pollinosis and springtime birth.

The connection could be a secondary association, the researchers note: There is a genetic component to allergies and it's possible, for example, that allergic parents may avoid conceiving in the fall for some reason. Or it could be attributable to lasting effects of pollen on the immune system of newborns, who have not yet developed the ability to neutralize airborne allergens.

The report is a new entry in a field that already contains a lot of contradictory information. "The literature is split right down the middle," says David B.K. Golden, an allergy specialist at the Johns Hopkins Medical Institutions in Baltimore. The Italian researchers' numbers, he says, "are certainly supportive of their conclusions, but more extensive research will be required to reach a conclusion."

Medicine capsules

- April brought a new arrival and some institute-shuffling at the National Institutes of Health in Bethesda, Md. At Congress's behest, the National Center for Nursing Research has been established. In addition, the National Institute of Arthritis and Musculoskeletal and Skin Diseases has branched off from the National Institute of Arthritis, Diabetes, and Digestive and Kidney Diseases, leaving behind the National Institute of Diabetes and Digestive and Kidney Diseases. For you acronym fans: NIADDK → NIAMS + NIDDK.
- With babies from frozen embryos already a reality (SN: 4/12/86, p. 232), frozen eggs aren't far behind. Researchers at the University of South Australia in Adelaide announce in the April 19 LANCET that they have impregnated a woman from whom unfertilized eggs had been removed, frozen, thawed, artificially inseminated and implanted. The woman is due to have twins in a couple of months.

Joanne Silberner reports from Washington, D.C., at the annual meeting of the Society for Investigative Dermatology

Blame it on your sebaceous glands

Sebaceous glands may be at the root of shiny pates, according to University of Miami (Fla.) researchers. The glands, which are adjacent to hair follicles and produce a protective coating for the skin and scalp, are physiologically different in bald men, they found.

Some people—including bald men—suggest that baldness is a sign of virility, believing that conventional male balding is caused by an excess of testosterone. But such balding, which begins in 40 percent of men between the ages of 18 and 39, is actually the result of an increased ability to *use* testosterone and not an increase of testosterone per se, says Marty E. Sawaya, one of the researchers. "You're really not more virile," she says.

Sawaya and her colleagues compared sebaceous glands in scalp samples removed from 12 balding men (aged 25 to 39) during hair transplant or scalp reduction surgery with 12 samples removed from nonbald men (aged 30 to 47) soon after death. They measured the number of testosterone receptors, which allow cells to hang on to and use testosterone, as well as the concentration of an enzyme involved in testosterone metabolism. They found that sebaceous glands from the bald men had twice the number of testosterone receptors, and double the enzyme level of sebaceous glands from the hairy scalps.

Sawaya says the discovery alone does not suggest a treatment. That would require an understanding of what is happening at the genetic level, she says.

Heat-sealing wounds

In medicine, lasers are used primarily for cutting through tissue or sealing off blood vessels. But they also have potential as a way to fuse together the sides of a wound, says R. Patrick Abergel of Harbor-UCLA Medical Center in Torrance, Calif. Abergel and his colleagues used lasers to weld skin wounds on mice and found that laser-sealed tissue held together as well as sutured skin, and there was less scarring.

"The laser welding has clear advantages over conventional suturing techniques," Abergel says. Laser welding, he adds, is sterile and nontactile, does not require an introduction of foreign materials into the wound and improves cosmetic results.

The researchers have also tried the procedure on pigs, whose skin has more in common with human skin than does mouse skin. But because the skin of a pig is thicker, it is a little more difficult to seal: Using too much energy burns the wound, and too little allows it to reopen. A second problem, they have found, is that pigment in dark pigskin absorbs the energy, making it difficult to weld without burning.

What makes a laser-sealed wound stick together has yet to be determined. "When you cook an egg, you're denaturing the protein," says Abergel. "Maybe here we're just denaturing the connective tissue."

Skin grafts for blistering disease

Epidermolysis bullosa is a group of hereditary skin diseases in which something as light as a human touch can cause the skin to blister and peel away, inviting infection and laying down scar tissue. Various treatments have been tried with little effect (SN: 1/26/85, p. 58). Andrew N. Lin of Rockefeller University in New York City, with his colleagues there and at Memorial Sloan-Kettering Cancer Center in New York City, have found that skin grafting helped in three boys suffering from a common form of the disease.

They removed skin from unaffected areas, grew it in culture, grafted it onto the affected areas and found that the skin "stuck." "Something happens to allow a foothold on the patients' skin," says Lin. "What we do does not correct the basic defect, but it does halt the progression."

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