



THE CITY OF NEW YORK

DEPARTMENT OF HEALTH AND MENTAL HYGIENE

Michael R. Bloomberg
Mayor

Thomas R. Frieden, M.D., M.P.H.
Commissioner

nyc.gov/health

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2009 Health Advisory # 9

Subcutaneous injection of potentially hazardous materials in New York City

- Health care providers should advise patients not to seek illegal injections for cosmetic enhancement.
- Health care providers should refer women, including transgender women, interested in cosmetic enhancement of their bodies to licensed medical providers or centers that offer counseling and referrals on safe, medically approved treatments.
- Health care providers that know or suspect that a patient is having or has had an adverse reaction to illegal cosmetic injections should notify the New York City Poison Control Center 24 hours a day at 1-212-POISONS (764-7667).

Please distribute to All Staff in Critical Care, Emergency Medicine, Primary Care, Family Medicine, Internal Medicine, Infectious Disease, Dermatology, Plastic Surgery, General Surgery, Hematology/Oncology, Obstetrics and Gynecology, and Pulmonary Medicine. Please also share with your non-hospital based primary care colleagues.

Dear Provider,

The New York City Department of Health and Mental Hygiene Poison Control Center (PCC) has been notified of cases of severe complications from cosmetic injections performed by unlicensed providers. DOHMH is also aware of the recent death of a Bronx woman following silicone injections to her thighs by an unlicensed medical provider. PCC was consulted on the following NYC cases:

Case 1. A male to female transgender patient reportedly paid an unlicensed practitioner to inject ~500 mL of castor oil subcutaneously into her hips and buttocks. She noted immediate local pain and erythema followed 2 hours after the procedure by abdominal and chest pain, emesis, headache, hematuria, jaundice, and tinnitus. 12 hours after the injection she presented to a local emergency department with anuria and apparent cellulitis. Her hospital course was complicated and included severe hemolysis, hepatitis, rhabdomyolysis, anuric renal failure requiring dialysis, and severe pulmonary compromise requiring intubation. She was discharged from the hospital on day 11 with persistent renal dysfunction requiring dialysis for another 1.5 months.

Case 2. A male to female transgender patient reported that she injected a large volume of cod liver oil into her breasts bilaterally using syringes and needles obtained in Mexico. She presented to her medical provider for painful inflammation of her breasts. On examination, her breasts were indurated, erythematous and tender. She did not show any improvement after aggressive antibiotic therapy and surgical debridement and bilateral mastectomy was considered.

Case 3. A Hispanic female reportedly paid an unlicensed provider that she met in an out of state hotel room to inject polydimethylsiloxane (medical grade silicone) into her buttocks. She developed difficulty breathing shortly after the procedure and presented to a local emergency room with severe respiratory distress secondary to pulmonary hemorrhage. She required intubation and ultimately extra-corporeal membrane oxygenation (ECMO). Although ECMO was discontinued after 1 week and she was weaned from mechanical ventilation, several months later she has still not made a full recovery.

Case 4. A Hispanic female reportedly paid an unlicensed provider that she met in an out of state hotel room to inject 1 liter of “silicone” into her buttocks bilaterally. She developed fever and shortness of breath shortly after the procedure and presented to a local emergency department in severe respiratory distress. Her symptoms slowly improved and she was released from the hospital 2 weeks later.

The subcutaneous injection of high-viscosity liquid preparations such as commercial/industrial or medical grade silicone, mineral oil (paraffin), or petroleum jelly is a widespread practice in the male-to-female transgender community. These cases have demonstrated that this is also practiced among women in New York City’s Hispanic community. These procedures are used to feminize the face, breasts, buttocks, hips, or calves and for augmentation of the breasts, hips and buttocks. The practice continues in spite of the inherent risks, since it presents a cheap and fast alternative to conventional plastic surgery. The substances may be mixed with a base, such as mineral, olive oil, or sesame oil for improved ease of injection or to purposefully induce a fibrotic reaction. Extremely large quantities may be used in an attempt to maximize the desired cosmetic effect, and are often injected under non-sterile conditions with needles which may be shared or reused. A common scenario is the provision of these treatments as a minor procedure by non-licensed practitioners posing as medical providers. In the transgender community the process can occur during parties called “pump-up” or “pumping” parties, where friends administer the treatment to each other.

These materials are not inert in the body. Subcutaneous injection of high-viscosity fluids can have acute, subacute and long-term health consequences. Serious acute health effects include respiratory failure and death secondary to pulmonary embolism of the injected material. Chest x-ray may show diffuse bilateral patchy alveolar infiltrates. Neurological deterioration and coma have also been described and may be due to cerebral embolism. Materials may also leak slowly into the intravascular space, and patients have been documented to present up to one week later in severe respiratory distress with hypoxia and hemoptysis from alveolar hemorrhage. Subacute and long term health effects are much more common and include cellulitis, fasciitis, abscess,

migration of the materials into other spaces, gross deformity, tumors and chronic pain. Additionally, acute, idiosyncratic reactions to various materials may also occur as in cases described here. Complications of needle sharing may include hepatitis B, hepatitis C, human immunodeficiency virus transmission and skin infections with atypical organisms (See HAN 56 from 2004).

Treatment is primarily supportive. Assessment of tetanus vaccination status and HBV, HCV, and HIV testing and counseling should be provided to these individuals. Health care providers that know or suspect that a patient is having or has had an adverse reaction to cosmetic injections should notify the New York City Poison Control Center 24 hours a day at **1-212-POISONS (764-7667)**.

DOHMH further recommends that health care providers caring for women, including transgender women, interested in procedures or treatments to cosmetically enhance their bodies counsel their patients on the risks involved and refer them to licensed medical providers who perform cosmetic enhancement procedures or centers that offer counseling and referrals on safe, medically approved treatments.

Specific resources for the transgender community include;

Callen-Lorde Community Health Center
356 West 18th Street
New York, NY 10011
212-271-7212

Director of Risk Reduction in Vulnerable Populations
New York City Department of Health and Mental Hygiene
40 Worth Street
New York, New York 10013
212-341-9817

Sincerely,

Nathan Graber

Nathan Graber, MD, MPH
Director
Environmental and Occupational Disease Epidemiology Program

Robert Hoffman

Robert Hoffman, MD
Director
New York City Poison Control Center

Nancy Clark

Nancy Clark, MA, CIH
Assistant Commissioner
Bureau of Environmental Disease Prevention

If you or your patients suspect a poisoning, call the Poison Control Center 24 hours a day at (212) POISONS (764-7667); Spanish-speaking callers, call (212) VENENOS (836-3667).

References

Smith SW, Graber NM, Johnson RC, Barr JR, Hoffman RS, Nelson LS. Multisystem organ failure after large volume injection of castor oil. *Ann Plast Surg.* 2009 Jan;62(1):12-4.

Hage JJ, Kanhai RC, Oen AL, van Diest PJ, Karim RB. The devastating outcome of massive subcutaneous injection of highly viscous fluids in male-to-female transsexuals. *Plast Reconstr Surg.* 107(3):734-41, 2001.