

I'm not a robot



Mesotherapy, also known as mesolift, is one of the dermatological anti-ageing treatments. It is a gentle method that stimulates skin circulation and cell renewal. In mesotherapy, we use tiny needles to inject highly concentrated active ingredients such as vitamins, amino acids, antioxidants and hyaluron into the skin. With the help of these micro-injections, the active ingredient mix reaches exactly the layers of the skin where it can unfold its effect. We adjust the active ingredients and the depth of the injection to your individual skin condition. Your skin appears rejuvenated, firmer and fresher after mesotherapy. Tired and sallow facial skin is better supplied with blood and captivates with that certain glow, a soft and youthful shimmer. For this reason, mesotherapy is also called mesoglow in the USA. The cocktail of active ingredients also offers protection against light-induced skin ageing and increases skin hydration. At the Swiss Derma Clinic in Zurich, we combine mesotherapy with other aesthetic treatments depending on the skin condition and the desired result. For example, with biostimulation, PRP lifting, laser treatments or with an individual cosmetic treatment. Mesotherapy is suitable for the facial skin, the hands and for the neck and décolleté. It is the ideal treatment for dry, horny and dull skin. A session lasts between 15 minutes and one hour. You can return to your daily activities immediately after the treatment. Mesotherapy is widely used as an effective method for skin rejuvenation, hair loss treatment and aesthetic problems such as cellulite. However, the effectiveness of this treatment method depends on the regular and correct intervals of the application. So, how often should mesotherapy sessions be performed? As HC International Clinic, we detail the factors affecting the frequency, session duration and results of mesotherapy treatment for you. Mesotherapy Sessions: General Information Mesotherapy is a treatment method performed by injecting vitamins, minerals, amino acids and other active ingredients into the middle layer of the skin. This method provides effective results in skin renewal, hair loss and cellulite treatment. However, the success and long-term effects of the treatment depend on the regularity of the sessions. Session Frequency and Treatment Duration In the initial phase of mesotherapy treatment, 4-6 sessions are recommended, usually once a week. This intensive treatment period allows the skin or hair to regenerate quickly and respond to the treatment. The number of sessions may vary depending on the purpose of the treatment and the needs of the person. After the initial period, the frequency of sessions is reduced to once a month or every two months to ensure that the effects of mesotherapy are permanent. These maintenance sessions help to maintain the health of the skin or hair and ensure that the results are long-lasting. In skin resurfacing treatments, this ongoing maintenance process usually lasts for 3-6 months. The frequency of mesotherapy sessions may vary depending on the area being treated, the person's skin type, age, general health and the desired results of mesotherapy. For example, people with more pronounced signs of aging may require more frequent sessions, while people with hair loss may require longer treatment times. Things to Consider Between Sessions Certain precautions should be taken between mesotherapy sessions to ensure that the skin and hair respond optimally to the treatment. First, it is important to protect the skin from the sun, use moisturizer and avoid chemicals that can irritate the skin between sessions to support the skin's healing process. At the same time, those undergoing hair mesotherapy should be gentle on the scalp and avoid aggressive hair care products. Seeing the Effects of Mesotherapy The effects of mesotherapy usually become visible after the first few sessions. In skin treatments, effects such as increased brightness and elasticity of the skin and reduction of fine lines are noticed. In hair treatment, a reduction in hair loss and a more vibrant appearance of the hair are observed. However, it is important to stick to the treatment plan and follow the recommended session intervals to achieve full results. Benefits of Mesotherapy Sessions Regular mesotherapy sessions help to maintain the health of the skin and hair and support the regeneration process. The treatment provides a long-lasting and natural rejuvenation effect. Mesotherapy is a treatment method that can be customized according to the needs of the individual. The frequency of sessions and duration of treatment are adjusted according to individual factors, aiming to achieve the best results. Mesotherapy is generally considered a safe treatment and unwanted side effects on the skin or hair are rare. However, these risks are minimized when the treatment is performed in a specialized clinic and by a professional team. Preparation for Mesotherapy Sessions In order to get the best results from mesotherapy sessions, some preparations should be made before and after the treatment. Before the treatment, it is recommended to clean the skin thoroughly and not to use any make-up or skin care products. Also, the use of blood thinners should be avoided before the sessions. After the treatment, it is important to protect the skin from the sun, avoid intensive skin care products and use moisturizer to support the skin's natural healing process. Mesotherapy sessions should be performed regularly to maintain skin and hair health and achieve aesthetic results. The duration of treatment and frequency of sessions are determined according to the individual's needs and regular application provides effective and lasting results in the long term. You can visit our HC International Clinic website for more information about mesotherapy and to create a customized treatment plan for you. Share – copy and redistribute the material in any medium or format for any purpose, even commercially. Adapt – remix, transform, and build upon the material for any purpose, even commercially. The licensor cannot revoke these freedoms as long as you follow the license terms. Attribution – You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. ShareAlike – If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original. No additional restrictions – You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits. You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation. No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material. It's amazing how many cosmetic treatments are out there that you might not even know about. Mesotherapy, a treatment founded in France, is one of those such treatments that's been around since the early 1920s, but isn't as well-known in the United States. If you, too, are interested in learning more about this treatment and considering getting it yourself, read on to find out the benefits of mesotherapy, how long it lasts, how much it typically costs, the side effects, and so much more. In its simplest form, mesotherapy is the injection of anything into the skin. Mesotherapy, also known as "bio-revitalization," is a strategic technique with different outcomes, depending on the ingredients used. "It's basically a transdermal injection of different compounds such as multivitamins, peptides, natural plant extracts, or even adipocyte (fat cell) reduction," explains Pietro Simone, celebrity esthetician and founder of Pietro Simone Skincare. "The bio-revitalization infuses ingredients into your skin that aren't necessarily fillers or Botox, which triggers the revitalization of the skin tissues." According to Simone, the benefits of mesotherapy are related to the type of ingredients used, from deep hydration to stimulation of the fibroblast, from brightening to support the renewal process, and from fighting cellulite and stretchmarks. David Goldberg, MD, a board-certified dermatologist at Schweiger Dermatology Group in NYC is not as convinced about mesotherapy's efficacy. "We did a study over 10 years ago, which was published in the Journal Dermatologic Surgery, that showed with both clinical evaluations and biopsies of the skin there was no improvement when just vitamins and minerals are injected in the skin," explains Dr. Goldberg. Although this technique remains popular in France, it is now rarely used in the US. What is now common in the US, however, is mesotherapy with hyaluronic acid—a simpler form of what is used as fillers. "These injections lead to a glow to the skin because they are a fabulous moisturizer," says Dr. Goldberg. "Lastly, Botox and similar substances are injected in microdoses (mesoBotox) for fine lines, oily skin, pore size, and flushing." This will really vary from individual, lifestyle, and skin condition at the starting point of the treatment. "Generally speaking, when I was preparing the client's skin pre-doctor mesotherapy session, the client would have been instructed on a course of treatments," explains Simone. In general, hyaluronic mesotherapy should be done once a month, while mesoBotox is done every three months, according to Dr. Goldberg. Of course, this will depend on your location and where you get the mesotherapy treatment(s). According to Dr. Goldberg, a hyaluronic acid mesotherapy treatment can cost about \$300-500 per treatment, and a mesoBotox treatment is about \$1000-\$1500 per session. According to Jimmy C. Sung, MD, a board-certified plastic and reconstructive surgeon and Medical Director of Tribeca Aesthetics, most substances used in mesotherapy are produced by compounding, thus lacking uniform standards and quality control. "Other times, drugs are being injected off-label, and there are no clinical studies on the efficacy and safety [of mesotherapy]," he explains. "Infection, irregularities, and lumpiness of the injected skin [can occur]." Generally speaking, it should be a safe and smooth treatment, according to Simone. However, it's super important to know what are the ingredients used in mesotherapy. "Swelling sometimes can be quite common, and bruising and some redness can occur, too—those are the main points I observed pre and post-treatment," says Simone. "Your treatment will really depend on the doctor. I always did the skin preparation, and then had the doctor do the injection part," explains Simone. "Then, I would have followed with a calming massage, LED therapy, and all related products." The main part of mesotherapy is the multiple microinjections that normally cover the entire face, neck, and eventually the décolleté. "If you're afraid of needles, I don't think this is the best treatment because mesotherapy requires a lot of microinjections," says Simone. Fat-dissolving mesotherapy usually uses chemicals like phospholipids to break down the fat cells. "It is kind of like pouring Drano to degrease the kitchen drain," explains Dr. Sung. "The effect is hard to predict and control. Liposuction, on the other hand, is removing fat surgically, and is more precise and predictable." Fat-dissolving mesotherapy and liposuction aim for the same results, but have very different actions and timing. Normally, with mesotherapy, the client has a certain number of appointments in order to achieve the desired result, according to Simone. It's the opposite with liposuction, where in one visit (generally speaking), you should achieve the dissolving results. Skip to content Non-invasive non-surgical technique This article has multiple issues. Please help improve it or discuss these issues on the talk page. (Learn how and when to remove these messages) This article needs more reliable medical references for verification or relies too heavily on primary sources. Please review the contents of the article and add the appropriate references if you can. Unsourced or poorly sourced material may be challenged and removed. Find sources: "Mesotherapy" – news · newspapers · books · scholar · JSTOR (May 2015) This article needs additional citations for verification. Please help improve this article by adding citations to reliable sources. Unsourced material may be challenged and removed.Find sources: "Mesotherapy" – news · newspapers · books · scholar · JSTOR (July 2007) (Learn how and when to remove this message) This article's factual accuracy is disputed. Relevant discussion may be found on the talk page. Please help to ensure that disputed statements are reliably sourced. (April 2023) (Learn how and when to remove this message) Some of this article's listed sources may not be reliable. Please help improve this article by looking for better, more reliable sources. Unreliable citations may be challenged and removed. (April 2023) (Learn how and when to remove this message) Mesotherapy (from Greek mesos, "middle", and therapy from Greek therapia, "treatment") is a form of alternative medicine which involves intradermal or subcutaneous injections of pharmaceutical preparations, such as tandonitis, tendon calcification, dental procedures, cancer, cervicobrachialgia, arthritis, lymphedema, and venous stasis.[7] Despite the lack of clinical trials, there have been case studies and medical papers written on mesotherapy as a cosmetic treatment.[7] Rod Rohrich, M.D., chairman of the Department of Plastic Surgery at the University of Texas Southwestern Medical Center is quoted as saying: "There is simply no data, no science and no information, to my knowledge, that mesotherapy works." The American Society of Plastic Surgeons issued a position statement not endorsing mesotherapy.[citation needed] In the United States, the FDA cannot control the act of practitioners injecting various mixtures into patient's bodies, because this practice falls under the jurisdiction of state medical boards. Robin Ashinoff, speaking for the American Academy of Dermatology, wrote "A simple injection is giving people false hope. Everybody's looking for a quick fix. But there is no quick fix for fat or fat deposits or for cellulite." The American Society for Dermatologic Surgery informed its members in February 2005 that "further study is warranted before this technique can be endorsed."[9] "No one says exactly what they put into the (syringe)," said Naomi Lawrence, a derma-surgeon at the University of Medicine and Dentistry of New Jersey. "One drug they often use, phosphatidylcholine, is unpredictable and causes extreme inflammation and swelling where injected. It is not a benign drug."[10] Mesotherapy is currently banned in a number of South American countries. Even Brazil, which tends to be less strict than the US in drug approvals, has banned the drug for these purposes.[10] In Australia, an alternative therapy salon was investigated by the Health Department after several clients developed skin abscesses on the calves, buttocks, thighs, abdomen, shoulders, face and neck after undergoing mesotherapy, with one patient also developing a mycobacterial infection.[11] Following undesirable effects observed on several patients of a French practitioner, an official ratification was published in France in April 2011 to ban mesotherapy as a method for removing fat deposits. This ban was issued in June 2011 by the French Council of State because the investigation proved that these undesirable effects weren't due to mesotherapy itself, but were due to unhygienic conditions.[12] In a prospective study, 10 patients underwent four sessions of facial mesotherapy using multivitamins at monthly intervals. This study found that there was no clinically relevant benefit for skin rejuvenation.[13] Deoxycholic acid received FDA approval as an injectable to dissolve submental fat June 2015.[6] This was based on the results of a phase III randomized trial of 2600 patients in which 68.2% of patients showed a response by measurement of the fat deposit; 81% had mild temporary adverse reactions of bruising, swelling, pain, numbness, erythema, and firmness around the treated area.[14] ^ Rittes, PG; Rittes, JC; Carriel, Amary MF (2006). "Injection of phosphatidylcholine in fat tissue: experimental study of local action in rabbits". *Aesthetic Plastic Surgery*. 30 (4): 474–8. doi:10.1007/s00266-005-0170-5. PMID 16858660. S2CID 21533809. ^ "Things to Pay Attention to After Mesotherapy Injections". *Fillercloud*. 2021-10-14. Retrieved 2023-03-02. ^ da Silva RL, de Oliveira FA, Medeiros RG, Cunha SV, de Moraes Gouveia GP (2021). "What is the physical-mechanical mechanism of pressurized mesotherapy?". *Medical Hypotheses*. 152: 110617. doi:10.1016/j.mehy.2021.110617. PMID 34082278. S2CID 235334561. ^ Maia RR, da Silva RM, Meyer PF, de Moraes Carreiro E, dos Santos Borges F, Rodriguez J, Farias SL, de Oliveira Varela GT (2021). "Comparative study of intradermotherapy with pressurized injection system and needles". *The American Journal of Cosmetic Surgery*. 38 (3): 171–180. doi:10.1177/0748806821990167. S2CID 234020649. ^ "Kybella- deoxycholic acid injection, solution". *DailyMed*. Archived from the original on 24 June 2021. Retrieved 20 June 2021. ^ a b c "FDA approves treatment for fat below the chin". Food and Drug Administration. April 29, 2015. Archived from the original on May 1, 2015. Retrieved December 16, 2019. ^ a b c Rotunda, Adam; Kolodney, Michael (April 2006). "Mesotherapy and Phosphatidylcholine Injections: Historical Clarification and Review" (PDF). *Dermatologic Surgery*. 32 (4): 465–480. CiteSeerX 10.1.1.506.2372. doi:10.1111/j.1524-4725.2006.32100.x. PMID 16681654. S2CID 9994696. Archived from the original (PDF) on March 3, 2016. Retrieved February 28, 2012. ^ "French Society of Mesotherapy : What's that ?". Archived from the original on 2015-07-15. Retrieved 2015-07-15. ^ Matarasso, Seth; Butterwick, Kimberly; Goldberg, David; Lawrence, Naomi; Mandy, Stephen; Sadick, Neil; Wexler, Patricia; Rotunda, Adam (January 2006). "Technology report: Mesotherapy". *American Society for Dermatologic Surgery*. Archived from the original on January 9, 2015. Retrieved February 27, 2012. ^ a b Puente, Maria (August 4, 2004). "Critics say mesotherapy offers slim chance". *USA Today*. Retrieved February 27, 2012. ^ "Cellulite therapy under investigation". *ABC News*. 2008-06-26. Archived from the original on January 13, 2009. ^ Conseil d'Etat: Ordonnance du 17 juin 2011, SARL Cellusonic et autres, Madame Valérie A. et autres Archived 2012-02-16 at the Wayback Machine ^ Amin S, Phelps R, Goldberg D (2006). "Mesotherapy for facial skin rejuvenation: a clinical, histologic, and electron microscopic evaluation". *Dermatologic Surgery*. 32 (12): 1467–72. doi:10.1111/j.1524-4725.2006.32353.x. PMID 17199654. S2CID 20652180. ^ "Deoxycholic acid injectable for submental fat dissolution". *The Dermatologist*. 23 (5): 8. 2015. American Board of Aesthetic Mesotherapy French Society of Mesotherapy Professional Board of Investigation^ Atlanta Archived 2016-03-25 at the Wayback Machine Retrieved from " ", the free encyclopedia that anyone can edit. 107,747 active editors 7,024,072 articles in English Claudette making landfall in Texas Hurricane Claudette was the third tropical storm and first hurricane of the 2003 Atlantic hurricane season. A fairly long-lived July Atlantic hurricane, Claudette began as a tropical wave in the eastern Caribbean. It moved westward past the Yucatán Peninsula before moving northward through the Gulf of Mexico. Claudette remained a tropical storm until just before making landfall in Port O'Connor, Texas, on July 15, when it quickly strengthened to a strong Category 1 hurricane. Forecasting its path and intensity was uncertain, resulting in widespread and often unnecessary preparations. Claudette caused one death and moderate damage in Texas, mostly from strong winds, as well as extensive beach erosion. Because of the damage, President George W. Bush declared portions of South Texas as a Federal Disaster Area. 2011 to ban mesotherapy as a method for removing fat deposits. This ban was issued in June 2011 by the French Council of State because the investigation proved that these undesirable effects weren't due to mesotherapy itself, but were due to unhygienic conditions.[12] In a prospective study, 10 patients underwent four sessions of facial mesotherapy using multivitamins at monthly intervals. This study found that there was no clinically relevant benefit for skin rejuvenation.[13] Deoxycholic acid received FDA approval as an injectable to dissolve submental fat June 2015.[6] This was based on the results of a phase III randomized trial of 2600 patients in which 68.2% of patients showed a response by measurement of the fat deposit; 81% had mild temporary adverse reactions of bruising, swelling, pain, numbness, erythema, and firmness around the treated area.[14] ^ Rittes, PG; Rittes, JC; Carriel, Amary MF (2006). "Injection of phosphatidylcholine in fat tissue: experimental study of local action in rabbits". *Aesthetic Plastic Surgery*. 30 (4): 474–8. doi:10.1007/s00266-005-0170-5. PMID 16858660. S2CID 21533809. ^ "Things to Pay Attention to After Mesotherapy Injections". *Fillercloud*. 2021-10-14. Retrieved 2023-03-02. ^ da Silva RL, de Oliveira FA, Medeiros RG, Cunha SV, de Moraes Gouveia GP (2021). "What is the physical-mechanical mechanism of pressurized mesotherapy?". *Medical Hypotheses*. 152: 110617. doi:10.1016/j.mehy.2021.110617. PMID 34082278. S2CID 235334561. ^ Maia RR, da Silva RM, Meyer PF, de Moraes Carreiro E, dos Santos Borges F, Rodriguez J, Farias SL, de Oliveira Varela GT (2021). "Comparative study of intradermotherapy with pressurized injection system and needles". *The American Journal of Cosmetic Surgery*. 38 (3): 171–180. doi:10.1177/0748806821990167. S2CID 234020649. ^ "Kybella- deoxycholic acid injection, solution". *DailyMed*. Archived from the original on 24 June 2021. Retrieved 20 June 2021. ^ a b c "FDA approves treatment for fat below the chin". Food and Drug Administration. April 29, 2015. Archived from the original on May 1, 2015. Retrieved December 16, 2019. ^ a b c Rotunda, Adam; Kolodney, Michael (April 2006). "Mesotherapy and Phosphatidylcholine Injections: Historical Clarification and Review" (PDF). *Dermatologic Surgery*. 32 (4): 465–480. CiteSeerX 10.1.1.506.2372. doi:10.1111/j.1524-4725.2006.32100.x. PMID 16681654. S2CID 9994696. Archived from the original (PDF) on March 3, 2016. Retrieved February 28, 2012. ^ "French Society of Mesotherapy : What's that ?". Archived from the original on 2015-07-15. Retrieved 2015-07-15. ^ Matarasso, Seth; Butterwick, Kimberly; Goldberg, David; Lawrence, Naomi; Mandy, Stephen; Sadick, Neil; Wexler, Patricia; Rotunda, Adam (January 2006). "Technology report: Mesotherapy". *American Society for Dermatologic Surgery*. Archived from the original on January 9, 2015. Retrieved February 27, 2012. ^ a b Puente, Maria (August 4, 2004). "Critics say mesotherapy offers slim chance". *USA Today*. Retrieved February 27, 2012. ^ "Cellulite therapy under investigation". *ABC News*. 2008-06-26. Archived from the original on January 13, 2009. ^ Conseil d'Etat: Ordonnance du 17 juin 2011, SARL Cellusonic et autres, Madame Valérie A. et autres Archived 2012-02-16 at the Wayback Machine ^ Amin S, Phelps R, Goldberg D (2006). "Mesotherapy for facial skin rejuvenation: a clinical, histologic, and electron microscopic evaluation". *Dermatologic Surgery*. 32 (12): 1467–72. doi:10.1111/j.1524-4725.2006.32353.x. PMID 17199654. S2CID 20652180. ^ "Deoxycholic acid injectable for submental fat dissolution". *The Dermatologist*. 23 (5): 8. 2015. American Board of Aesthetic Mesotherapy French Society of Mesotherapy Professional Board of Investigation^ Atlanta Archived 2016-03-25 at the Wayback Machine Retrieved from " ", the free encyclopedia that anyone can edit. 107,747 active editors 7,024,072 articles in English Claudette making landfall in Texas Hurricane Claudette was the third tropical storm and first hurricane of the 2003 Atlantic hurricane season. A fairly long-lived July Atlantic hurricane, Claudette began as a tropical wave in the eastern Caribbean. It moved westward past the Yucatán Peninsula before moving northward through the Gulf of Mexico. Claudette remained a tropical storm until just before making landfall in Port O'Connor, Texas, on July 15, when it quickly strengthened to a strong Category 1 hurricane. Forecasting its path and intensity was uncertain, resulting in widespread and often unnecessary preparations. Claudette caused one death and moderate damage in Texas, mostly from strong winds, as well as extensive beach erosion. Because of the damage, President George W. Bush declared portions of South Texas as a Federal Disaster Area. 2011 to ban mesotherapy as a method for removing fat deposits. This ban was issued in June 2011 by the French Council of State because the investigation proved that these undesirable effects weren't due to mesotherapy itself, but were due to unhygienic conditions.[12] In a prospective study, 10 patients underwent four sessions of facial mesotherapy using multivitamins at monthly intervals. This study found that there was no clinically relevant benefit for skin rejuvenation.[13] Deoxycholic acid received FDA approval as an injectable to dissolve submental fat June 2015.[6] This was based on the results of a phase III randomized trial of 2600 patients in which 68.2% of patients showed a response by measurement of the fat deposit; 81% had mild temporary adverse reactions of bruising, swelling, pain, numbness, erythema, and firmness around the treated area.[14] ^ Rittes, PG; Rittes, JC; Carriel, Amary MF (2006). "Injection of phosphatidylcholine in fat tissue: experimental study of local action in rabbits". *Aesthetic Plastic Surgery*. 30 (4): 474–8. doi:10.1007/s00266-005-0170-5. PMID 16858660. S2CID 21533809. ^ "Things to Pay Attention to After Mesotherapy Injections". *Fillercloud*. 2021-10-14. Retrieved 2023-03-02. ^ da Silva RL, de Oliveira FA, Medeiros RG, Cunha SV, de Moraes Gouveia GP (2021). "What is the physical-mechanical mechanism of pressurized mesotherapy?". *Medical Hypotheses*. 152: 110617. doi:10.1016/j.mehy.2021.110617. PMID 34082278. S2CID 235334561. ^ Maia RR, da Silva RM, Meyer PF, de Moraes Carreiro E, dos Santos Borges F, Rodriguez J, Farias SL, de Oliveira Varela GT (2021). "Comparative study of intradermotherapy with pressurized injection system and needles". *The American Journal of Cosmetic Surgery*. 38 (3): 171–180. doi:10.1177/0748806821990167. S2CID 234020649. ^ "Kybella- deoxycholic acid injection, solution". *DailyMed*. Archived from the original on 24 June 2021. Retrieved 20 June 2021. ^ a b c "FDA approves treatment for fat below the chin". Food and Drug Administration. April 29, 2015. Archived from the original on May 1, 2015. Retrieved December 16, 2019. ^ a b c Rotunda, Adam; Kolodney, Michael (April 2006). "Mesotherapy and Phosphatidylcholine Injections: Historical Clarification and Review" (PDF). *Dermatologic Surgery*. 32 (4): 465–480. CiteSeerX 10.1.1.506.2372. doi:10.1111/j.1524-4725.2006.32100.x. PMID 16681654. S2CID 9994696. Archived from the original (PDF) on March 3, 2016. Retrieved February 28, 2012. ^ "French Society of Mesotherapy : What's that ?". Archived from the original on 2015-07-15. Retrieved 2015-07-15. ^ Matarasso, Seth; Butterwick, Kimberly; Goldberg, David; Lawrence, Naomi; Mandy, Stephen; Sadick, Neil; Wexler, Patricia; Rotunda, Adam (January 2006). "Technology report: Mesotherapy". *American Society for Dermatologic Surgery*. Archived from the original on January 9, 2015. Retrieved February 27, 2012. ^ a b Puente, Maria (August 4, 2004). "Critics say mesotherapy offers slim chance". *USA Today*. Retrieved February 27, 2012. ^ "Cellulite therapy under investigation". *ABC News*. 2008-06-26. Archived from the original on January 13, 2009. ^ Conseil d'Etat: Ordonnance du 17 juin 2011, SARL Cellusonic et autres, Madame Valérie A. et autres Archived 2012-02-16 at the Wayback Machine ^ Amin S, Phelps R, Goldberg D (2006). "Mesotherapy for facial skin rejuvenation: a clinical, histologic, and electron microscopic evaluation". *Dermatologic Surgery*. 32 (12): 1467–72. doi:10.1111/j.1524-4725.2006.32353.x. PMID 17199654. S2CID 20652180. ^ "Deoxycholic acid injectable for submental fat dissolution". *The Dermatologist*. 23 (5): 8. 2015. American Board of Aesthetic Mesotherapy French Society of Mesotherapy Professional Board of Investigation^ Atlanta Archived 2016-03-25 at the Wayback Machine Retrieved from " ", the free encyclopedia that anyone can edit. 107,747 active editors 7,024,072 articles in English Claudette making landfall in Texas Hurricane Claudette was the third tropical storm and first hurricane of the 2003 Atlantic hurricane season. A fairly long-lived July Atlantic hurricane, Claudette began as a tropical wave in the eastern Caribbean. It moved westward past the Yucatán Peninsula before moving northward through the Gulf of Mexico. Claudette remained a tropical storm until just before making landfall in Port O'Connor, Texas, on July 15, when it quickly strengthened to a strong Category 1 hurricane. Forecasting its path and intensity was uncertain, resulting in widespread and often unnecessary preparations. Claudette caused one death and moderate damage in Texas, mostly from strong winds, as well as extensive beach erosion. Because of the damage, President George W. Bush declared portions of South Texas as a Federal Disaster Area. 2011 to ban mesotherapy as a method for removing fat deposits. This ban was issued in June 2011 by the French Council of State because the investigation proved that these undesirable effects weren't due to mesotherapy itself, but were due to unhygienic conditions.[12] In a prospective study, 10 patients underwent four sessions of facial mesotherapy using multivitamins at monthly intervals. This study found that there was no clinically relevant benefit for skin rejuvenation.[13] Deoxycholic acid received FDA approval as an injectable to dissolve submental fat June 2015.[6] This was based on the results of a phase III randomized trial of 2600 patients in which 68.2% of patients showed a response by measurement of the fat deposit; 81% had mild temporary adverse reactions of bruising, swelling, pain, numbness, erythema, and firmness around the treated area.[14] ^ Rittes, PG; Rittes, JC; Carriel, Amary MF (2006). "Injection of phosphatidylcholine in fat tissue: experimental study of local action in rabbits". *Aesthetic Plastic Surgery*. 30 (4): 474–8. doi:10.1007/s00266-005-0170-5. PMID 16858660. S2CID 21533809. ^ "Things to Pay Attention to After Mesotherapy Injections". *Fillercloud*. 2021-10-14. Retrieved 2023-03-02. ^ da Silva RL, de Oliveira FA, Medeiros RG, Cunha SV, de Moraes Gouveia GP (2021). "What is the physical-mechanical mechanism of pressurized mesotherapy?". *Medical Hypotheses*. 152: 110617. doi:10.1016/j.mehy.2021.110617. PMID 34082278. S2CID 235334561. ^ Maia RR, da Silva RM, Meyer PF, de Moraes Carreiro E, dos Santos Borges F, Rodriguez J, Farias SL, de Oliveira Varela GT (2021). "Comparative study of intradermotherapy with pressurized injection system and needles". *The American Journal of Cosmetic Surgery*. 38 (3): 171–180. doi:10.1177/0748806821990167. S2CID 234020649. ^ "Kybella- deoxycholic acid injection, solution". *DailyMed*. Archived from the original on 24 June 2021. Retrieved 20 June 2021. ^ a b c "FDA approves treatment for fat below the chin". Food and Drug Administration. April 29, 2015. Archived from the original on May 1, 2015. Retrieved December 16, 2019. ^ a b c Rotunda, Adam; Kolodney, Michael (April 2006). "Mesotherapy and Phosphatidylcholine Injections: Historical Clarification and Review" (PDF). *Dermatologic Surgery*. 32 (4): 465–480. CiteSeerX 10.1.1.506.2372. doi:10.1111/j.1524-4725.2006.32100.x. PMID 16681654. S2CID 9994696. Archived from the original (PDF) on March 3, 2016. Retrieved February 28, 2012. ^ "French Society of Mesotherapy : What's that ?". Archived from the original on 2015-07-15. Retrieved 2015-07-15. ^ Matarasso, Seth; Butterwick, Kimberly; Goldberg, David; Lawrence, Naomi; Mandy, Stephen; Sadick, Neil; Wexler, Patricia; Rotunda, Adam (January 2006). "Technology report: Mesotherapy". *American Society for Dermatologic Surgery*. Archived from the original on January 9, 2015. Retrieved February 27, 2012. ^ a b Puente, Maria (August 4, 2004). "Critics say mesotherapy offers slim chance". *USA Today*. Retrieved February 27, 2012. ^ "Cellulite therapy under investigation". *ABC News*. 2008-06-26. Archived from the original on January 13, 2009. ^ Conseil d'Etat: Ordonnance du 17 juin 2011, SARL Cellusonic et autres, Madame Valérie A. et autres Archived 2012-02-16 at the Wayback Machine ^ Amin S, Phelps R, Goldberg D (2006). "Mesotherapy for facial skin rejuvenation: a clinical, histologic, and electron microscopic evaluation". *Dermatologic Surgery*. 32 (12): 1467–72. doi:10.1111/j.1524-4725.2006.32353.x. PMID 17199654. S2CID 20652180. ^ "Deoxycholic acid injectable for submental fat dissolution". *The Dermatologist*. 23 (5): 8. 2015. American Board of Aesthetic Mesotherapy French Society of Mesotherapy Professional Board of Investigation^ Atlanta Archived 2016-03-25 at the Wayback Machine Retrieved from " ", the free encyclopedia that anyone can edit. 107,747 active editors 7,024,072 articles in English Claudette making landfall in Texas Hurricane Claudette was the third tropical storm and first hurricane of the 2003 Atlantic hurricane season. A fairly long-lived July Atlantic hurricane, Claudette began as a tropical wave in the eastern Caribbean. It moved westward past the Yucatán Peninsula before moving northward through the Gulf of Mexico. Claudette remained a tropical storm until just before making landfall in Port O'Connor, Texas, on July 15, when it quickly strengthened to a strong Category 1 hurricane. Forecasting its path and intensity was uncertain, resulting in widespread and often unnecessary preparations. Claudette caused one death and moderate damage in Texas, mostly from strong winds, as well as extensive beach erosion. Because of the damage, President George W. Bush declared portions of South Texas as a Federal Disaster Area. 2011 to ban mesotherapy as a method for removing fat deposits. This ban was issued in June 2011 by the French Council of State because the investigation proved that these undesirable effects weren't due to mesotherapy itself, but were due to unhygienic conditions.[12] In a prospective study, 10 patients underwent four sessions of facial mesotherapy using multivitamins at monthly intervals. This study found that there was no clinically relevant benefit for skin rejuvenation.[13] Deoxycholic acid received FDA approval as an injectable to dissolve submental fat June 2015.[6] This was based on the results of a phase III randomized trial of 2600 patients in which 68.2% of patients showed a response by measurement of the fat deposit; 81% had mild temporary adverse reactions of bruising, swelling, pain, numbness, erythema, and firmness around the treated area.[14] ^ Rittes, PG; Rittes, JC; Carriel, Amary MF (2006). "Injection of phosphatidylcholine in fat tissue: experimental study of local action in rabbits". *Aesthetic Plastic Surgery*. 30 (4): 474–8. doi:10.1007/s00266-005-0170-5. PMID 16858660. S2CID 21533809. ^ "Things to Pay Attention to After Mesotherapy Injections". *Fillercloud*. 2021-10-14. Retrieved 2023-03-02. ^ da Silva RL, de Oliveira FA, Medeiros RG, Cunha SV, de Moraes Gouveia GP (2021). "What is the physical-mechanical mechanism of pressurized mesotherapy?". *Medical Hypotheses*. 152: 110617. doi:10.1016/j.mehy.2021.110617. PMID 34082278. S2CID 235334561. ^ Maia RR, da Silva RM, Meyer PF, de Moraes Carreiro E, dos Santos Borges F, Rodriguez J, Farias SL, de Oliveira Varela GT (2021). "Comparative study of intradermotherapy with pressurized injection system and needles". *The American Journal of Cosmetic Surgery*. 38 (3): 171–180. doi:10.1177/0748806821990167. S2CID 234020649. ^ "Kybella- deoxycholic acid injection, solution". *DailyMed*. Archived from the original on 24 June 2021. Retrieved 20 June 2021. ^ a b c "FDA approves treatment for fat below the chin". Food and Drug Administration. April 29, 2015. Archived from the original on May 1, 2015. Retrieved December 16, 2019. ^ a b c Rotunda, Adam; Kolodney, Michael (April 2006). "Mesotherapy and Phosphatidylcholine Injections: Historical Clarification and Review" (PDF). *Dermatologic Surgery*. 32 (4): 465–480. CiteSeerX 10.1.1.506.2372. doi:10.1111/j.1524-4725.2006.32100.x. PMID 16681654. S2CID 9994696. Archived from the original (PDF) on March 3, 2016. Retrieved February 28, 2012. ^ "French Society of Mesotherapy : What's that ?". Archived from the original on 2015-07-15. Retrieved 2015-07-15. ^ Matarasso, Seth; Butterwick, Kimberly; Goldberg, David; Lawrence, Naomi; Mandy, Stephen; Sadick, Neil; Wexler, Patricia; Rotunda, Adam (January 2006). "Technology report: Mesotherapy". *American Society for Dermatologic Surgery*. Archived from the original on January 9, 2015. Retrieved February 27, 2012. ^ a b Puente, Maria (August 4, 2004). "Critics say mesotherapy offers slim chance". *USA Today*. Retrieved February 27, 2012. ^ "Cellulite therapy under investigation". *ABC News*. 2008-06-26. Archived from the original on January 13, 2009. ^ Conseil d'Etat: Ordonnance du 17 juin 2011, SARL Cellusonic et autres, Madame Valérie A. et autres Archived 2012-02-16 at the Wayback Machine ^ Amin S, Phelps R, Goldberg D (2006). "Mesotherapy for facial skin rejuvenation: a clinical, histologic, and electron microscopic evaluation". *Dermatologic Surgery*. 32 (12): 1467–72. doi:10.1111/j.1524-4725.2006.32353.x. PMID 17199654. S2CID 20652180. ^ "Deoxycholic acid injectable for submental fat dissolution". *The Dermatologist*. 23 (5): 8. 2015. American Board of Aesthetic Mesotherapy French Society of Mesotherapy Professional Board of Investigation^ Atlanta Archived 2016-03-25 at the Wayback Machine Retrieved from " ", the free encyclopedia that anyone can edit. 107,747 active editors 7,024,072 articles in English Claudette making landfall in Texas Hurricane Claudette was the third tropical storm and first hurricane of the 2003 Atlantic hurricane season. A fairly long-lived July Atlantic hurricane, Claudette began as a tropical wave in the eastern Caribbean. It moved westward past the Yucatán Peninsula before moving northward through the Gulf of Mexico. Claudette remained a tropical storm until just before making landfall in Port O'Connor, Texas, on July 15, when it quickly strengthened to a strong Category 1 hurricane. Forecasting its path and intensity was uncertain, resulting in widespread and often unnecessary preparations. Claudette caused one death and moderate damage in Texas, mostly from strong winds, as well as extensive beach erosion. Because of the damage, President George W. Bush declared portions of South Texas as a Federal Disaster Area. 2011 to ban mesotherapy as a method for removing fat deposits. This ban was issued in June 2011 by the French Council of State because the investigation proved that these undesirable effects weren't due to mesotherapy itself, but were due to unhygienic conditions.[12] In a prospective study, 10 patients underwent four sessions of facial mesotherapy using multivitamins at monthly intervals. This study found that there was no clinically relevant benefit for skin rejuvenation.[13] Deoxycholic acid received FDA approval as an injectable to dissolve submental fat June 2015.[6] This was based on the results of a phase III randomized trial of 2600 patients in which 68.2% of patients showed a response by measurement of the fat deposit; 81% had mild temporary adverse reactions of bruising, swelling, pain, numbness, erythema, and firmness around the treated area.[14] ^ Rittes, PG; Rittes, JC; Carriel, Amary MF (2006). "Injection of phosphatidylcholine in fat tissue: experimental study of local action in rabbits". *Aesthetic Plastic Surgery*. 30 (4): 474–8. doi:10.1007/s00266-005-0170-5. PMID 16858660. S2CID 21533809. ^ "Things to Pay Attention to After Mesotherapy Injections". *Fillercloud*. 2021-10-14. Retrieved 2023-03-02. ^ da Silva RL, de Oliveira FA, Medeiros RG, Cunha SV, de Moraes Gouveia GP (2021). "What is the physical-mechanical mechanism of pressurized mesotherapy?". *Medical Hypotheses*. 152: 110617. doi:10.1016/j.mehy.2021.110617. PMID 34082278. S2CID 235334561. ^ Maia RR, da Silva RM, Meyer PF, de Moraes Carreiro E, dos Santos Borges F, Rodriguez J, Farias SL, de Oliveira Varela GT (2021). "Comparative study of intradermotherapy with pressurized injection system and needles". *The American Journal of Cosmetic Surgery*. 38 (3): 171–180. doi:10.1177/0748806821990167. S2CID 234020649. ^ "Kybella- deoxycholic acid injection, solution