

SDC 2. Summary of Articles Reviewed

Article	Type of Study	Level of Evidence	No. of Subjects	Purpose	Results
Ali, 1983	RCT	I	54	Explore how abdominal binders affect pulmonary function	Abdominal binders do not have significant effects on pulmonary function.
Arici, 2016	RCT	I	104	Evaluate the effects of abdominal binders on gastrointestinal function, mobility, pulmonary function, and pain after abdominal surgery	Abdominal binders do not affect pulmonary and gastrointestinal function, but they can improve mobility soon after surgery and decrease pain.
Backman, 2023	RCT	I	184	Compare two different postoperative bras after breast cancer surgery and evaluate their impact on pain	Among patients with pain at three weeks, patients with a stable bra with compression reported significantly lower pain score than those randomized to the soft bra.
Berjeaut, 2015	Control trial	I	15	Evaluate how compression garments affect venous flow in the common femoral vein	Compression garments can increase venous stasis.
Block, 2010	Review	V	–	Explore how cold compression is used after orthopedic injury and/or surgery	Cold compression can alleviate postoperative pain and drainage and may help patients return to function faster.
Cabbarzade, 2021	RCT	I	40	Compare the results of patients with and without external splints applied after rhinoplasty	By using surgical tape only, the disadvantages of external splinting are avoided, and at the same time, periorbital edema and ecchymosis are less common.
Camirand, 2000	Expert opinion	V	–	Describe the author's practice of postoperative compression after breast augmentation and its effects on capsular contracture	Three months of compressive maneuvers including pressing on one's breasts and lying prone decreased capsular contracture after breast augmentation.
Challita, 2019	Case series	IV	211	Evaluate cosmetic results of rhinoplasty in the absence of postoperative nasal splinting	Satisfactory cosmetic results can be obtained while avoiding the complications, cost, and bulky dressings associated with external splints.
Cheifetz, 2010	RCT	I	75	Evaluate how abdominal binders affect postoperative mobility, perceived distress, pain, and pulmonary function after major abdominal surgery	Abdominal binders decreased pain and patient distress after major abdominal surgery with no effect on pulmonary function.

Chen, 1998	RCT	I	41	Determine the effect of a pressure garments on post-surgical drainage and seroma formation in breast cancer patients	Pressure garments led to no improvements in post-operative drainage or seroma formation.
Chowbey, 2000	Case series	IV	202	Assess the risks and efficacy of laparoscopic ventral hernia repair.	The introduction of routine postoperative binder use in authors' practice was associated with a 32% to 18% reduction in seroma incidence.
Filobbos, 2012	Expert opinion	V	–	Describe the use of Tubigrip* as a compression dressing after brachioplasty	Tubigrip* can help decrease hypertrophic scarring and seroma formation after brachioplasty.
Fontes de Moraes, 2023	RCT	I	32	Evaluate the effectiveness of compression garments in reducing subcutaneous edema after abdominoplasty	Patients who did not wear a compression garment after abdominoplasty showed less subcutaneous edema formation after 24 days of surgery than those who wore the garment.
Grillo, 2021	Case series	IV	643	Discuss the effectiveness of bandage in bichectomy postoperatively concerning major complications like bleeding and subcutaneous emphysema	Bandages are effective in the decrease of major complications related to bichectomy.
Illouz, 1989	Expert opinion	V	–	Describe the importance of compression dressings after lipoplasty and how they should be used	–
Illouz, 1989	Case series	IV	189	Determine most effective pressure to decrease edema and optimize skin outcomes after lipoplasty	The optimal pressure of postoperative compression garments is 17–20 mmHg.
Illouz, 2006	Expert opinion	V	–	Describe the cosmetic outcomes and complications the author has experienced with ways to reduce said complications	–
Jones, 2004	Retrospective	III	910	Determine the effects of dressings, drains, fibrin glue, tumescence and adrenaline on hematoma formation after rhytidectomy	No difference in hematoma rate occurred with dressings, drains, and fibrin glue.
Kaafarani, 2009	RCT	I	145	Identify factors associated with seroma formation following hernia repair	Abdominal binder use was not associated with a decreased seroma incidence.

Khan, 2023	Systematic review	I	2,425	To determine the role of nasal splinting following rhinoplasty	Nasal splinting did not reduce edema nor ecchymosis following rhinoplasty and was not necessary to achieve desirable outcomes
Kontos, 2008	Case control	III	200	Investigate the effect of pressure dressings after modified radical mastectomy in reducing seroma formation and drainage	Pressure dressings reduced the rate of seroma formation and decreased the time to drain removal.
Kottayasamy, 2013	RCT	I	161	Compare the efficacy of external compression dressing, suture flap fixation, and the conventional method of closed suction drains in the prevention of seroma formation	Compression dressing reduced duration of drainage significantly but not the total drain output or seroma incidence.
Larson, 2009	RCT	I	54	Evaluate how compressive abdominal binders affect pulmonary function after laparotomy	Abdominal binders had no effect on postoperative pulmonary function.
Liu, 2020	Meta-analysis	I	511	Evaluate the effects of compression bandaging on pain, swelling, and bleeding after total knee arthroplasty	Compression bandaging does not significantly affect pain, swelling, range of motion, or bleeding postoperatively.
Martins, 2022	RCT	I	34	Evaluate whether the postoperative wearing of an abdominal binder provides any additional contribution to the reduction of either seroma formation or recurrent diastasis recti when abdominoplasty is performed with quilting sutures.	The postoperative wearing of abdominal binders was not effective in preventing either seroma formation or recurrent diastasis following abdominoplasty with quilting sutures.
Matsen, 1974	Animal study	–	–	Explore how pressure affects swelling after fracture	Pressure can decrease swelling after fracture.
Mladick, 2003	Expert opinion	V	–	Describe surgical method and postoperative care for calf and ankle contouring	Postoperative compression dressings and pneumatic compression boots aid in creating good leg contour.
Nathan, 2001	RCT	I	130	Determine whether postoperative compression reduces hematoma formation and swelling after breast augmentation	Compressive wrapping after breast augmentation does not reduce hematoma or induration postoperatively.

Noodleman, 2002	Expert opinion	V	–	Achieve more complete removal of subplatysmal fat with laser-assisted neck lift and decrease postoperative hematomas, rippling, and folding with a new postoperative dressing	Changes resulted in improved cervicomenal angle, decreased jowling, and minimized hematoma and ripple formation.
O'Hea, 1999	RCT	I	135	Determine whether postoperative compression after axillary lymph node dissection decreases postoperative drainage and seroma formation	Postoperative compression does not reduce drainage and may increase seroma formation.
Ohayon, 2013	Retrospective	III	52	Evaluate incidence of incorrectly sized compression stockings and skin irregularities in postoperative orthopedic patients	The incidence of ill-fitting compression stockings and skin irregularities is low.
Olsén, 2009	RCT	I	37	Evaluate effects of abdominal binders on pulmonary function, pain, mobility, and length of hospital stay	Abdominal binders do not significantly affect pulmonary function, mobility, length of hospital stay, or pain.
Rodrigues, 2013	Case control	III	18	Evaluate ventilatory function and intra-abdominal pressure in patients undergoing abdominoplasty with L-shaped plication of external oblique aponeurosis	Postoperative pain, BMI, abdominal binders, and increased abdominal pressure do not affect ventilatory function.
Rothman, 2014	Systematic review	I	578	Explore how postoperative abdominal binders affect pain, seroma formation, pulmonary function, physical function, and abdominal pressure after abdominal surgery and abdominoplasty	Abdominal binders may reduce postoperative stress, but do not have a significant effect on function, seroma formation, and pain.
Suh, 2018	Cohort	II	52	Determine the effect of early compression on flap survival	Early compression and ambulation do not change flow velocity or volume in flap pedicle and do not increase flap complication rate
Taş, 2020	RCT	I	60	To analyze the effects of the vibration and pressure treatments in the early postoperative period of rhinoplasty	Rapid regression of edema and ecchymosis may be achieved using the vibrating nasal cast technique that may minimize patient discomfort, pain, and sebaceous activity following rhinoplasty.

Teimourian, 1995	Case series	IV	100	Describe the author's clinical experience using a MicroFoam tape dressing to apply compression after facelift operations	MicroFoam tape dressings resulted in zero occurrences of ecchymosis or hemorrhage following facelift operations
Vidal 2016	Case series	IV	2,033	Describe the author's clinical experience using surgical tape without splinting following rhinoplasty	Surgical tape following rhinoplasty is an inexpensive, widely available, and reliable method that is easier to apply and more comfortable than a traditional plaster
Vulović, 2018	Case series	IV	151	Evaluate the incidence of nonaesthetic complications and the efficiency of corrective rhinoplasty without the use of tamponade and external splint.	Rhinoplasty without using tamponade and immobilization was safe, comfortable, and economical. The degree of pain, edema, and ecchymosis were low, as well as the incidence of other complications.

RCT, randomized controlled trial; BMI, body mass index.

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