

## The Disruption of Trauma Research: An Analysis of the Top Cited Versus Disruptive Trauma Research Publications

BRIEF TITLE (RUNNING HEAD): CITATION AND DISRUPTION IN TRAUMA RESEARCH

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JW: study design, data collection, data interpretation, writing, and critical revision.

EW: study design, data interpretation, writing, and critical revision.

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No author has any relevant conflicts of interest or funding to disclose.

The views presented here are the authors and do not necessarily reflect those of the United States government, the Department of Defense, or the United States Army.

Abstract word count: 284

Manuscript word count: 2401

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## SUPPLEMENTAL DATA

Supplemental Table 1. Selected journals and search terms.

This table shows the journals and search terms queried to identify publications.

<b>Trauma Journal</b>	<b>Non-Trauma Journal</b>	<b>Search Terms*</b>
Journal of Trauma	Journal of the American College of Surgeons	Hemorrhage
Journal of Trauma and Acute Care Surgery	Lancet	Trauma
Trauma Surgery and Acute Care Open	Annals of Surgery	Injury
Injury	Shock	Penetrating injury
Acute Care Surgery	JAMA	Blunt injury
European Journal of Trauma and Emergency Surgery	JAMA Surgery	Traumatic brain injury
Scandinavian Journal of Trauma Resuscitation and Emergency Medicine	Archives of Surgery	Gunshot
	New England Journal of Medicine	Stab
	American Journal of Surgery	Knife
	Surgery	Bullet
	Journal of Surgical Research	Motor vehicle
	Critical Care Medicine	Hemorrhagic shock
		Tourniquet
		Traumatic wound
		Triage
		Prehospital
		Trauma systems
		Injury prevention

\*Search terms only utilized for non-trauma journals. All articles from trauma journals were queried

Supplemental Table 2. The top 100 most disruptive publications in trauma (DS = disruptive score)

Rank	Title	Authors	Journal	Citations	Year	DS
	Epidemiology of major trauma and trauma deaths in Los Angeles County	Demetriades D, Murray J, Sinz B, et al.	J Am Coll Surg	84	1998	0.76
2	Pediatric trauma. The No. 1 killer of children	Haller JA Jr.	JAMA	61	1983	0.68
3	Improved quality of care and reduction of housestaff workload using trauma nurse practitioners	Spisso J, O'Callaghan C, McKennan M, et al.	J Trauma	106	1990	0.59
4	Wheels-in-line roller skating injuries	Callé SC, Eaton RG.	J Trauma	50	1993	0.58
5	Electrical injury	Hartford CE, Ziffren SE.	J Trauma	4	1971	0.55
6	Intensive care in a field hospital in an urban disaster area: lessons from the August 1999 earthquake in Turkey	Halpern P, Rosen B, Carasso S, et al.	Crit Care Med	34	2003	0.50
7	The injured colon: therapeutic considerations	Kirkpatrick JR, Rajpal SG.	Am J Surg	9	1975	0.49
8	Hypogastric Artery Ligation for Uncontrollable Hemorrhage in Acute Pelvic Trauma	Seavers r, Lynch J, Ballard R, et al.	Surgery	8	1964	0.43
9	Blunt trauma to the larynx and upper trachea: immediate treatment, complications and late reconstructive procedures	Curtin JW, Holinger PH, Greeley PW.	J Trauma	3	1966	0.41
10	Clinical experience with axillary burns in children	Law EJ, Hofer RW, MacMillan BG.	J Trauma	1	1972	0.40
11	Injuries of the vena cava caused by external trauma	Oschner JL, Crawford ES, De Bakey ME	Surgery	10	1961	0.38
12	The special injury pattern in terrorist bombings	Kluger Y, Peleg K, Daniel-Aharonson L, et al.	J Am Coll Surg	102	2004	0.37
13	Trauma and forensic medicine	Carmona R, Prince K.	J Trauma	18	1989	0.36
14	Family presence during trauma resuscitation: a survey of AAST and ENA members. American Association for the Surgery of Trauma. Emergency Nurses Association	Helmer SD, Smith RS, Dort JM, et al.	J Trauma	125	2000	0.36
15	A history of the American Association for the Surgery of Trauma: the first 50 years	Peltier LF, Davis JH.	J Trauma	7	1989	0.36
16	Mechanical cornpicker hand injuries	Campbell DC 2nd, Bryan RS, Cooney WP 3rd, et al.	J Trauma	3	1979	0.35
17	The value of healing by secondary intention for sizeable defects of the face	Goldwyn RM, Rueckert F.	Arch Surg	5	1977	0.35
18	Posttraumatic ischemic stenosis of the small bowel	Bryner UM, Longerbeam JK, Reeves CD.	Arch Surg	36	1980	0.35
19	Liver replacement after massive hepatic trauma	Esquivel CO, Bernardos A, Makowka L, et al.	J Trauma	39	1987	0.35
20	Gunshot wounds of the face	Yao ST, Vanecko RM, Corley RD, et al.	J Trauma	1	1972	0.35
21	Guidelines for hospital emergency medical service in a university hospital in France: a progress report	Murat JE, Vaur JL, Bernard JL, et al.	Am J Surg	4	1980	0.33
22	What's a trauma surgeon worth? A salary survey of the Eastern Association for the Surgery of Trauma	Fakhry SM, Watts DD.	J Trauma	14	2000	0.30
23	Use of an intra-aortic balloon catheter tamponade for controlling intra-abdominal hemorrhage in man	Hughes CW	Surgery	67	1954	0.30
24	Arterial shunting as an adjunct to major limb revascularization	Nunley JA, Koman LA, Urbaniak JR.	Ann Surg	56	1981	0.30
25	Impalement injuries: the preferred approach	Ketterhagen JP, Wassermann DH.	J Trauma	34	1983	0.28
26	Comparison of poly-N-acetyl glucosamine with commercially available topical hemostats for achieving hemostasis in coagulopathic models of splenic hemorrhage	Schwartzberg SD, Chan MW, Cole DJ, et al.	J Trauma	35	2004	0.27
27	Surgical management of soft tissue defects of the ankle-heel region	Bennett JE, Kahn RA.	J Trauma	0	1972	0.27
28	Early operative management of isolated sternal fractures	Richardson JD, Grover FL, Trinkle JK.	J Trauma	3	1975	0.26

29	Three or more rib fractures as an indicator for transfer to a Level I trauma center: a population-based study	Lee RB, Bass SM, Morris JA Jr, et al.	J Trauma	101	1990	0.26
30	Earthquake disaster in Nicaragua: reflections on the initial management of massive casualties	Whittaker R, Fareed D, Green P, et al.	J Trauma	4	1974	0.26
31	Organ injury scaling: spleen and liver (1994 revision)	Moore EE, Cogbill TH, Jurkovich GJ, et al.	J Trauma	754	1995	0.26
32	Impalement wounds of the head and chest by reinforced steel bars with recovery: an unusual case report	Okumori M, Futamura A, Tsukuura T, et al.	J Trauma	17	1981	0.25
33	The use of telemedicine for real-time video consultation between trauma center and community hospital in a rural setting improves early trauma care: preliminary results	Rogers FB, Ricci M, Caputo M, et al.	J Trauma	91	2001	0.25
34	Diagnosis and treatment of retained foreign bodies in the hand	Anderson MA, Newmeyer WL 3rd, Kilgore ES Jr.	Am J Surg	205	1982	0.25
35	Mandibular fractures: the problem patient	Eid K, Lynch DJ, Whitaker LA.	J Trauma	2	1976	0.25
36	Acute injuries of peripheral arteries with associated bone and soft tissue injuries	Abdul Razeq MS, Mnaymneh W, Yacoubian HD.	J Trauma	2	1973	0.25
37	Subdural haematoma after whiplash injury	Ommaya AK, Yarnell P.	Lancet	21	1969	0.24
38	Development of a statewide trauma registry	Gillott AR, Thomas JM, Forrester C.	J Trauma	30	1989	0.24
39	Direct transfer to operating room improves care of trauma patients. A simple, economically feasible plan for large hospitals	Fischer RP, Jelense S, Perry JF Jr.	JAMA	4	1978	0.24
40	The use of crosslinked gelatin as a tissue adhesive to control hemorrhage from liver and kidney	Tatooles CJ, Braunwald NS.	Surgery	7	1966	0.24
41	Electrical injuries: a review of 65 cases	DiVincenzi FC, Moncrief JA, Pruitt BA Jr.	J Trauma	24	1969	0.24
42	Degloving injuries of the extremities and torso	Kudsk KA, Sheldon GF, Walton RL.	J Trauma	64	1981	0.24
43	Trauma and the veterinarian	Landercasper J, Cogbill TH, Strutt PJ, et al.	J Trauma	46	1988	0.23
44	Assessing multiple trauma: is the cervical spine enough?	Pal JM, Mulder DS, Brown RA, et al.	J Trauma	15	1988	0.22
45	Carburetor priming: a cause of gasoline burn	Klabacha M, Nelson H, Parshley P, et al.	J Trauma	8	1985	0.22
46	Softball sliding injuries. A prospective study comparing standard and modified bases	Janda DH, Wojtys EM, Hankin FM, et al.	JAMA	37	1988	0.22
47	Burns in motor vehicle accidents	Purdue GF, Hunt JL, Layton TR, et al.	J Trauma	18	1985	0.22
48	An integrated university emergency medicine - trauma program	Geis WP, Altergott RA, Giacchino JL, et al.	J Trauma	5	1982	0.21
49	Relationship between weather and seasonal factors and trauma admission volume at a Level I trauma center	Bhattacharyya T, Millham FH.	J Trauma	68	2001	0.21
50	Informed consent: is it always necessary?	Parvizi J, Chakravarty R, Og B, et al.	Injury	10	2008	0.21
51	Use of the nonexpanded mesh graft	Neale HW.	J Trauma	1	1974	0.21
52	Myth or reality: hematocrit and hemoglobin differ in trauma	Nijboer JM, van der Horst IC, Hendriks HG, et al.	J Trauma	26	2007	0.21
53	Open pelvic fracture: a lethal injury	Rothenberger D, Velasco R, Strate R, et al.	J Trauma	15	1978	0.20
54	The surgery of traumatic arteriovenous fistulas and aneurysms: a five-year follow up study of 215 lesions	Hughes CW, Jahnke EJ Jr	Ann Surg	21	1958	0.20
55	Haemothorax and thoracic spinal fracture. A case for early stabilization	Dalvie SS, Burwell M, Noordeen MH.	Injury	10	2000	0.20
56	A Canadian National Trauma Registry: the time is now	McLellan BA.	J Trauma	9	1997	0.20
57	Primary closure of civilian colorectal wounds	Josen AS, Ferrer JM Jr, Forde KA, et al.	Ann Surg	2	1972	0.20
58	Major abdominal and thoracic trauma associated with spinal cord injury: problems in management	Bricker DL, Waltz TA Jr, Telford RJ, et al.	J Trauma	1	1971	0.20
59	Small animal bites: the role of primary closure	Thomson HG, Svitek V.	J Trauma	6	1973	0.20

	THE EARLY SURGICAL TREATMENT OF BURNS. I. EXPERIMENTAL STUDIES UTILIZING INTRAVENOUS VITAL DYE FOR DETERMINING THE DEGREE OF INJURY	Randolf JG, Leape LL, Gross RE	Surgery	1	1964	0.19
60	Remote cerebral effects on EEG in high-energy missile trauma	Göransson AM, Ingvar DH, Kutyna F.	J Trauma	14	1988	0.19
61	Isolated gastric rupture due to blunt trauma	Bussey HJ, McGehee RN, Tyson KR.	J Trauma	1	1975	0.19
62	Prehospital stabilization of critically injured patients: a failed concept	Smith JP, Bodai BI, Hill AS, Frey CF.	J Trauma	247	1985	0.19
63	Children's traffic safety program: influence of early elementary school safety education on family seat belt use	Hazinski MF, Eddy VA, Morris JA Jr.	J Trauma	27	1995	0.19
64	High mortality in elderly drivers is associated with distinct injury patterns: analysis of 187,869 injured drivers	Bauzá G, Lamorte WW, Burke PA, et al.	J Trauma	19	2008	0.19
65	Burn injury. Analysis of survival and hospitalization time for 937 patients	Curreri PW, Luterma A, Braun DW Jr, et al.	Ann Surg J Am Coll Surg	144	1980	0.19
66	Medical and surgical care of our four assassinated presidents	Trunkey D, Farjah F.	Surg	4	2005	0.19
67	Why am I here?	Reath DB.	J Trauma	7	2000	0.19
68	Renal trauma requiring surgery: an analysis of 185 cases	Sagalowsky AI, McConnell JD, Peters PC.	J Trauma	63	1983	0.18
69	Traumatic aneurysm of the superficial temporal artery. Squash-ball disease	Golden GT, Fox JW, Williams GS, et al.	JAMA	5	1975	0.18
70	Treatment of open crushing type of industrial injuries of the hand and forearm: degloving, open circumferential, heat-press, and nail-bed injuries	Tajima T.	J Trauma Arch Surg	2	1974	0.18
71	Railway surgery. Traumatology and managed health care in 19th-century United States	Rutkow IM.	Surg	8	1993	0.18
72	The attempted assassination of President Reagan. Medical implications and historical perspective	Aaron BL, Rockoff SD. Sheldon GF, Kagarise MJ.	JAMA	6	1994	0.18
73	John Hunter and the American School of Surgery	Schroeder FA, Viegas SF, Carmichael K.	J Trauma	5	1998	0.18
74	Shrimp winch injuries	Carroll RE, Match RM.	J Trauma	4	2008	0.18
75	Common errors in the management of wrist lacerations	Shaftan GW, Chiu CJ, Dennis C, Harris B.	J Trauma	1	1974	0.18
76	Fundamentals of physiologic control of arterial hemorrhage		Surgery	14	1965	0.18
77	Penetrating cardiac trauma. Experience with thirty-four patients in a hospital without cardiopulmonary bypass capability	Beach PM Jr, Bognolo D, Hutchinson JE, Jacobs LM Jr, Goody MM, Sinclair A.	Am J Surg	3	1976	0.18
78	The role of a trauma center in disaster management	Gazzaniga AB, Stanton WW, Bartlett RH.	J Trauma Am J Surg	32	1983	0.18
79	Laparoscopy in the diagnosis of blunt and penetrating injuries to the abdomen	Richardson JD, Miller FB.	Am J Surg	16	1976	0.18
80	Will future surgeons be interested in trauma care? Results of a resident survey	Brudvik C.	J Trauma Injury	139	1992	0.18
81	Child injuries in Bergen, Norway			33	2000	0.18
82	The quantitative swab culture and smear: A quick, simple method for determining the number of viable aerobic bacteria on open wounds	Levine NS, Lindberg RB, Mason AD Jr, et al. Wood MH, Gerrick SJ, Lucas CE.	J Trauma Am J Surg	67	1976	0.18
83	Primary repair for closed lobar bronchus injury		J Trauma Am J Surg	1	1978	0.18
84	Treatment of penetrating gunshot wounds of the chest. Experience with one hundred forty-five cases	Borja AR, Ransdell HT. Hoyt DB, Shackford SR, Fridland PH, et al.	Surg	4	1971	0.18
85	Video recording trauma resuscitations: an effective teaching technique	Hewitt RL, Sanders PW	J Trauma	106	1988	0.17
86	Acute Ureteral Obstruction from Gunshot: Report of an Unusual Case	Gant TD, Epstein LI.	Ann Surg J Trauma	0	1965	0.17
87	Low-velocity gunshot wounds to the maxillofacial complex	Luna GK, Maier RV, Pavlin EG, et al.	J Trauma	5	1979	0.17
88	Incidence and effect of hypothermia in seriously injured patients	Hang YS, Lin GD, Miller JW.	J Trauma	292	1987	0.17
89	Traumatic forequarter amputation: case report	West JG, Cales RH, Gazzaniga AB.	J Trauma Arch Surg	1	1979	0.17
90	Impact of regionalization. The Orange County experience		Surg	285	1983	0.17
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92	Therapeutic efficacy of Biobrane in partial- and full-thickness thermal injury	McHugh TP, Robson MC, Heggers JP, et al.	Surgery	38	1986	0.17
93	Do it right, do the right thing	Hassett JM.	J Trauma	3	1996	0.17
94	The inadequacy of peritoneal lavage in diagnosing acute diaphragmatic rupture	Freeman T, Fischer RP.	J Trauma	4	1976	0.17
95	Indications for operation for abdominal trauma	Requarth W	Surgery	3	1959	0.16
96	Fractures of the mandible caused by stoning--return of an ancient entity	Nahlieli O, Baruchin AM, Neder A.	J Trauma	0	1993	0.16
97	The mesh skin graft in trauma: history and preliminary report on acute wound coverage	Salisbury RB.	J Trauma	0	1971	0.16
98	A national alcohol and trauma center survey. Missed opportunities, failures of responsibility	Soderstrom CA, Cowley RA.	Arch Surg	101	1987	0.16
99	Etiology and clinical course of missed spine fractures	Reid DC, Henderson R, Saboe L, et al.	J Trauma	53	1987	0.16
100	Management of massive thoraco-abdominal wall defect from close-range shotgun blast	Carrasquilla C, Watts J, Ledgerwood A, et al.	J Trauma	13	1971	0.16

Supplemental Table 3. The top 100 most developmental publications in trauma (DS = disruptive score)

Rank	Title	Authors	Journal	Citations	Year	DS
1	An overlapping pubic dislocation treated by closed reduction: case report and review of the literature	Robinson D, Hendel D, Halperin N.	J Trauma	15	1989	-0.54
2	Traumatic forequarter amputation	Layton TR, Vilella ER, Marrangoni AG.	J Trauma	11	1981	-0.40
3	Traumatic hemipelvectomy: case report and literature review	Meester GL, Myerley WH.	J Trauma	3	1975	-0.35
4	Traumatic hemipelvectomy	Moore WM, Brown JJ, Haynes JL, et al.	J Trauma	22	1987	-0.35
5	Internal fixation of an acetabular fracture during pregnancy	Dunlop DJ, McCahill JP, Blakemore ME.	Injury	8	1997	-0.33
6	Complete evisceration of the small intestine through a perianal wound as a result of suction at a wading pool	Gomez-Juarez M, Cascales P, Garcia-Olmo D, et al.	J Trauma	13	2001	-0.30
7	Anatomic considerations in penetrating gluteal wounds	Mercer DW, Buckman RF Jr, Sood R, et al.	Arch Surg	13	1992	-0.28
8	Stab wounds to the gluteal region: a management strategy	Makrin V, Sorene ED, Soffer D, et al.	J Trauma	10	2001	-0.28
9	Propane thermal injuries: case report and review of the literature	Matook GM, Sasken H, Akelman E.	J Trauma	7	1994	-0.25
10	Closed reduction of coronal fractures of the capitellum	Ochner RS, Bloom H, Palumbo RC, et al.	J Trauma	57	1996	-0.24
11	Closed injuries of the pectoralis major muscle	Tietjen R.	J Trauma	66	1980	-0.24
12	Traumatic pseudodiverticulum of the esophagus in the newborn infant	Armstrong RG, Lindberg EF, Stanford W, et al.	Surgery	1	1970	-0.23
13	Complete traumatic transection of the thyroid gland	Oertli D, Harder F.	Surgery	17	1994	-0.22
14	Management of duodenal wounds	Stone HH, Fabian TC.	J Trauma	26	1979	-0.21
15	The use of pyloric exclusion in the management of severe duodenal injuries	Vaughan GD 3rd, Frazier OH, Graham DY, et al.	Am J Surg	27	1977	-0.21
16	Traumatic abdominal wall hernia	Dubois PM, Freeman JB.	J Trauma	34	1981	-0.21
17	Prospective screening for blunt cerebrovascular injuries: analysis of diagnostic modalities and outcomes	Miller PR, Fabian TC, Croce MA, et al.	Ann Surg	311	2002	-0.20
18	Acute traumatic abdominal hernia: case reports	Damschen DD, Landercasper J, Cogbill TH, et al.	J Trauma	108	1994	-0.20
19	The Krukenberg procedure: a surgical option for the treatment of double hand amputees in Sierra Leone	Irmay F, Merzougou B, Vettorel D.	Lancet	12	2000	-0.20
20	Penetrating stab wound of the gluteus--a potentially life-threatening injury: case reports	Feigenberg Z, Ben-Baruch D, Barak R, et al.	J Trauma	8	1992	-0.20
21	Handlebar hernia: a rare traumatic abdominal wall hernia	Perez VM, McDonald AD, Ghani A, et al.	J Trauma	27	1998	-0.19
22	Scapulothoracic dissociation caused by blunt trauma	Damschen DD, Cogbill TH, Siegel MJ.	J Trauma	43	1997	-0.19
23	Open anterior dislocation of the hip in a child	Khan SA, Sadiq SA, Abbas M, et al.	J Trauma	11	2001	-0.19
24	The surgical management of duodenal trauma. Precepts based on a review of 247 cases	Snyder WH 3rd, Weigelt JA, Watkins WL, et al.	Arch Surg	117	1980	-0.19
25	Reliability of indications for cervical spine films in trauma patients	Kreipke DL, Gillespie KR, McCarthy MC, et al.	J Trauma	93	1989	-0.19
26	Ligation of the suprarenal vena cava and right nephrectomy with complete recovery	Ramnath R, Walden EC, Caguin F.	Am J Surg	6	1966	-0.18
27	Handlebar hernia: case report and review of the literature	Kubalak G.	J Trauma	51	1994	-0.18
28	Traumatic transdiaphragmatic intercostal hernia secondary to coughing: case report and review of the literature	Rogers FB, Leavitt BJ, Jensen PE.	J Trauma	24	1996	-0.18
29	Civilian parachute injuries; 10 years on and no lessons learned	Dawson M, Asghar M, Pryke S, et al.	Injury	12	1998	-0.18
30	Superior gluteal artery aneurysm	Williams W Jr, Jackson GF Jr, Greene C.	J Trauma	3	1977	-0.18
31	Retained intrapulmonary bullet presenting with bronchial obstruction	Kelley WA, James EC.	J Trauma	0	1976	-0.18

33	Traumatic dislocation of the testes	Pollen JJ, Funckes C.	J Trauma	24	1982	-0.16
32	Methods of controlling presacral bleeding	Hill AD, Menzies-Gow N, Darzi A.	J Am Coll Surg	22	1994	-0.16
34	Massive subgaleal hematoma resulting in skin compromise and airway obstruction	Nichter LS, Bolton LL, Reinisch JF, et al.	J Trauma	15	1988	-0.16
35	Primary repair of colon wounds. A prospective trial in nonselected patients	George SM Jr, Fabian TC, Voeller GR, et al.	Ann Surg	138	1989	-0.16
36	Traumatic lipomas/pseudolipomas	Penoff JH.	J Trauma	31	1982	-0.16
37	Fitness to drive in a below knee plaster? An evidence-based response	Nunn T, Baird C, Robertson D, et al.	Injury	6	2007	-0.16
38	A new technique for delayed primary closure of fasciotomy wounds	Chiverton N, Redden JF.	Injury	27	2000	-0.16
39	Lisfranc joint injuries: trauma mechanisms and associated injuries	Vuori JP, Aro HT.	J Trauma	123	1993	-0.16
40	Surgical judgment in the management of penetrating wounds of the abdomen: experience with 2212 patients	Nance FC, Wennar MH, Johnson LW, et al.	Ann Surg	21	1974	-0.15
41	Nonoperative management of blunt splenic injury: a 5-year experience	Haan JM, Bochicchio GV, Kramer N, et al.	J Trauma	216	2005	-0.15
43	The scalp as a donor site: revisited	Brou J, Vu T, McCauley RL, Herndon DN, et al.	J Trauma	31	1990	-0.15
42	Gluteal stab wound is a frequent and potentially dangerous injury	Susmallian S, Ezri T, Elis M, et al.	Injury Am J Surg	8	2005	-0.15
44	Combined arterial, venous, and ureteral injury complicating lumbar disk surgery	Moore CA, Cohen A. Pozzati E, Gaist G, Vinci A, et al.	J Trauma	19	1982	-0.15
45	Traumatic interhemispheric subdural hematomas	Chappuis CW, Frey DJ, Dietzen CD, et al.	Ann Surg	139	1991	-0.15
46	Management of penetrating colon injuries. A prospective randomized trial	Rupprecht H, Rumenapf G, Braig H, et al.	J Trauma	20	1994	-0.14
47	Acute bleeding caused by rupture of the thyroid gland following blunt neck trauma: case report	Lankford R, Block NL, Politano VA.	J Trauma	1	1974	-0.14
48	Gunshot wounds of the ureter: a review of 10 cases	Greenfield LJ, Hatcher CR Jr.	Ann Surg	1	1963	-0.14
49	Post-traumatic Internal Mammary Arteriovenous Fistula: Diagnostics Considerations and Report of a Case	Snider HR	Surgery	5	1956	-0.14
50	Acute duodenal obstruction secondary to intramural hematoma	Haan JM, Biffi W, Knudson MM, et al.	J Trauma	188	2004	-0.14
51	Splenic embolization revisited: a multicenter review	Evans RN Jr, Foss FE.	J Trauma	14	1984	-0.14
52	Traumatic hemipelvectomy in combination with traumatic amputation of an upper extremity	Hartz CR, Beckenbaugh RD.	J Trauma	5	1979	-0.14
53	Long-term results of resection of the distal ulna for post-traumatic conditions	Martin TD, Feliciano DV, Mattox KL, et al.	Arch Surg	82	1983	-0.14
54	Severe duodenal injuries. Treatment with pyloric exclusion and gastrojejunostomy	Jones K, Sharp C, Mangram AJ, et al.	JAMA	83	2006	-0.14
55	The effects of preinjury clopidogrel use on older trauma patients with head injuries	Schoo MJ, Scott FA, Boswick JA Jr.	J Trauma	92	1980	-0.13
56	High-pressure injection injuries of the hand	Gates RL, Helmkamp JC, Wilson SL, et al.	J Trauma	17	2002	-0.13
57	Deer stand-related trauma in West Virginia: 1994 through 1999	Malone JV Jr, Spencer FC	Surgery	11	1956	-0.13
58	The nonoperative treatment of traumatic chylothorax	Massac E Jr, Siram SM, Leffall LD Jr.	Am J Surg	26	1983	-0.13
59	Penetrating neck wounds	Gregory JS, Flancbaum L, Townsend MC, et al.	J Trauma	103	1991	-0.13
60	Incidence and timing of hypothermia in trauma patients undergoing operations	Balouris CA.	Lancet	16	1990	-0.13
61	Rubber and plastic bullet eye injuries in Palestine	Blane CE, White SJ, Wesley JR, et al.	Surgery	26	1981	-0.13
62	Immediate traumatic pulmonary pseudocyst formation in children	Netto FA, Hamilton P, Rizoli SB, et al.	J Trauma	71	2006	-0.13
63	Traumatic abdominal wall hernia: epidemiology and clinical implications	Ali J, Adam R, Stedman M, et al.	J Trauma	59	1994	-0.13
64	Cognitive and attitudinal impact of the Advanced Trauma Life Support program in a developing country	Mansi MK, Emran M, el-Mahrouky A, et al.	J Trauma	45	1993	-0.13
65	Experience with penile fractures in Egypt: long-term results of immediate surgical repair					



66	Metallic fragment embolization to the cerebral circulation	Kapp JP, Gielchinsky I, Jelsma R.	J Trauma	2	1973	-0.12
67	Ureteral contusion with gunshot wounds	Cass AS.	J Trauma	18	1984	-0.12
68	Major venous injury with pelvic fracture	Motsay GJ, Manlove C, Perry JF.	J Trauma	3	1969	-0.12
69	Posterior dislocation of the sternoclavicular joint with obstruction of the innominate vein: case report	Ono K, Inagawa H, Kiyota K, et al.	J Trauma	58	1998	-0.12
70	Traumatic injury to the azygous vein: case report	Butler DA, Schneider RF, Jadali M.	J Trauma	14	1995	-0.12
72	Management of tar and asphalt injuries	Stratta RJ, Saffle JR, Kravitz M, et al.	Am J Surg	30	1983	-0.12
71	Car-surfing in southwest Ohio: incidence and injuries	Carey J, McCarthy MC, Ekeh AP, et al.	J Trauma	2	2005	-0.12
73	Traumatic and spontaneous pyeloduodenal fistulas	McDougal WS, Persky L.	J Trauma	4	1972	-0.12
74	Halo-vest immobilization increases early morbidity and mortality in elderly odontoid fractures	Tashjian RZ, Majercik S, Biffi WL, et al.	J Trauma	147	2006	-0.12
75	Treatment-related outcomes from blunt cerebrovascular injuries: importance of routine follow-up arteriography	Biffi WL, Ray CE Jr, Moore EE, et al.	Ann Surg	260	2002	-0.12
76	Nonunion of pelvic fractures	Ebraheim NA, Biyani A, Wong F.	J Trauma	9	1998	-0.12
77	Emergent abdominal sonography as a screening test in a new diagnostic algorithm for blunt trauma	Boulanger BR, McLellan BA, Brenneman FD, et al.	J Trauma	123	1996	-0.12
78	Blunt cerebrovascular injuries: diagnosis and treatment	Miller PR, Fabian TC, Bee TK, et al.	J Trauma	224	2001	-0.12
79	Traumatic hemipelvectomy: a report of successful reimplantation	Osti M, Mittler C, Putzke M, et al.	Injury	14	2006	-0.12
80	Diagnostic and therapeutic laparoscopy for penetrating abdominal trauma: a multicenter experience	Zantut LF, Ivatury RR, Smith RS, et al.	J Trauma	131	1997	-0.12
81	Human injury as a result of the recent foot and mouth crisis	Mitra S, Mallick A.	Injury	2	2003	-0.12
82	Traumatic abdominal wall hernia	Malangoni MA, Condon RE.	J Trauma	50	1983	-0.12
83	One hundred percent fascial approximation with sequential abdominal closure of the open abdomen	Cothren CC, Moore EE, Johnson JL, et al.	JAMA	121	2006	-0.12
84	Traumatic hernia	Guly HR, Stewart IP.	J Trauma	43	1983	-0.12
85	Prospective study of blunt aortic injury: Multicenter Trial of the American Association for the Surgery of Trauma	Fabian TC, Richardson JD, Croce MA, et al.	J Trauma	495	1997	-0.11
86	Arterial bullet embolism following thoracic gunshot wounds	Trimble C.	Ann Surg	12	1968	-0.11
87	Operative chest wall fixation with osteosynthesis plates	Engel C, Krieg JC, Madey SM, et al.	J Trauma	58	2005	-0.11
88	The injured colon	Burch JM, Brock JC, Gevirtzman L, et al.	Ann Surg	82	1986	-0.11
89	The unrecognized epidemic of blunt carotid arterial injuries: early diagnosis improves neurologic outcome	Biffi WL, Moore EE, Ryu RK, et al.	Ann Surg	257	1998	-0.11
90	Primary repair of the colon: when is it a safe alternative?	Shannon FL, Moore EE.	Surgery	96	1985	-0.11
92	Initial evaluation and management of gunshot wounds to the face	Demetriades D, Chahwan S, Gomez H, et al.	J Trauma	88	1998	-0.11
91	Correlating weather and trauma admissions at a level I trauma center	Rising WR, O'Daniel JA, Roberts CS.	J Trauma	71	2006	-0.11
93	Fracture of the occipital condyle: case report and review of the literature	Desai SS, Coumas JM, Danylevich A, et al.	J Trauma	32	1990	-0.11
94	Coccygectomy for coccygodynia: do we really have to wait?	Cebesoy O, Guclu B, Kose KC, et al.	Injury	33	2007	-0.11
95	The injured colon: relationships of management to complications	Flint LM, Vitale GC, Richardson JD, et al.	Ann Surg	103	1981	-0.11
99	Packing and planned reexploration for hepatic and retroperitoneal hemorrhage: critical refinements of a useful technique	Cué JJ, Cryer HG, Miller FB, et al.	J Trauma	162	1990	-0.11
97	High-pressure injection injuries of the hand	Pai CH, Wei DC, Hou SP.	J Trauma	36	1991	-0.11
96	Bilateral thoracoabdominal impalement: avoiding pitfalls in the management of impalement injuries	Thomson BN, Knight SR.	J Trauma	22	2000	-0.11

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98	Bilateral sacroiliac joint fracture-dislocation: a case report	Carl A, Thomas S.	J Trauma	5	1990	-0.11
100	Transcorpis impalement: occurrence in an unusual manner	Knott LH, Barnett WO.	J Trauma	0	1978	-0.11