

Curriculum Vitae

Dr. Gabriel Amir

Division of Pediatric Cardiac Surgery

Schneider Children's Medical Center of Israel

14 Kaplan Street 49202

Petach Tikva

050-4057199

GabrielA@Clalit.org.il

Gabriel Amir M.D PhD

Education:

- 1986 -1992** M.D., Sackler School of Medicine, Tel Aviv University, Israel.
- 1994–2001** Heart Surgery Resident, the Chaim Sheba Medical Center, Tel Hashomer, Israel.
- 2001-2003** Congenital Heart Surgery Resident, Congenital Heart Surgery Unit, the Chaim Sheba Medical Center, Tel Hashomer, Israel.
- 1998-2003** Clinical Instructor – Surgery, Sackler School of Medicine, Tel Aviv University, Israel.
- 1999–2003** PhD student – Sackler School of Medicine, Tel Aviv University, Israel.
- 2003-2004** Post Doctoral Research Fellow. Department of Pediatric Heart Surgery. Lucille Packard Childrens Hospital, Stanford University, Stanford, USA.
- 2004-2006** Clinical Pediatric Cardiac Surgery Fellow. Department of Pediatric Cardiac Surgery. Lucille Packard Childrens Hospital, Stanford University, Stanford , USA.
- 2006–present** Cardiac Surgery Department , Belinson Hospital, Division of Congenital Heart Surgery, Schneider Children’s Medical Center of Israel.

Memberships and affiliations

Israel Heart Society – member

Prizes and Awards

1. Neufeld Prize – Israel Heart Society – Original work 2003.
2. J.J Kellerman Young Investigator Award 2003 – second prize.
3. Ami Cohen Young Investigator Cardiac Surgery Award –The Israel Heart Society and the Israel Society of Cardiothoracic Surgery. April 2002.
4. Recipient of the 2003-2004 Israeli-American Physician Fellowship.
5. Recipient of 2011 Israel, Frida and Haya Hamer Tel Aviv University grant for research (Evolution of calcium channels from neonate to infant).

B.1. ORIGINAL ARTICLES**B.1. Articles Published**

1. Viskin S, **Amir G**, Sanaullah S, Lev E, Heller K, Villa Y, Zak Z, Chapman J, Laniado S, Belhassen B.
Attitudes of attending physicians to the incidental diagnosis of hypercholesterolemia in hospitalized patients.
Am J Cardiol. 1995 Mar 1;75(7):511-3.
(CARDIAC & CARDIOVASCULAR SYSTEMS, 33/117, IF 3.368, Cited)

2. Moshkovitz Y, Paz Y, Shabtai E, Cotter G, **Amir G**, Smolinsky AK, Mohr R.
Predictors of early and overall outcome in coronary artery bypass without cardiopulmonary bypass.
Eur J Cardiothorac Surg. 1997 Jul;12(1):31-9.
(SURGERY, 39/199, IF 2.550, Cited 21)

3. Mohr R, Moshkovitch Y, Shapira I, **Amir G**, Hod H, Gurevitch J.
Coronary artery bypass without cardiopulmonary bypass for patients with acutemyocardial infarction.
J Thorac Cardiovasc Surg. 1999 Jul; 118(1):50-6.
(SURGERY, 14/199, IF 3.406, Cited 29)

4. Apter S, **Amir G**, Taler M, Gayer G, Kuriansky J, Amitai M, Smolinsky AK, Hertz M.
Unexpected subdiaphragmatic findings on CT of the chest in septic patients after cardiac surgery.
Clin Radiol. 2002 Apr; 57(4):287-91.
(RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING, 49/116, IF 1.952, Cited 1)

5. Lotan D, Prince T, Dagan O, Keller N, Ben-Abraham R, Weinbroum A, **Amir G**, Augarten A, Smolinski A, Barzilay Z, Paret G.
Soluble P-selectin and the postoperative course following cardiopulmonary bypass in children.
Paediatr Anaesth. 2001 May;11(3):303-8.
(PEDIATRICS 34/115, IF 2.100, Cited)

6. **Amir G**, Rubinsky B, Kassif Y, Horowitz L, Smolinsky AK, Lavee J.
Preservation of myocyte structure and mitochondrial integrity in subzero cryopreservation of mammalian hearts for transplantation using antifreeze proteins--an electron microscopy study.
Eur J Cardiothorac Surg. 2003 Aug;24(2):292-6; discussion 296-7.
(SURGERY, 39/199, IF 2.550, Cited 29)

7. Keidan I, **Amir G**, Mandel M, Mishali D.
The metabolic effects of fresh versus old stored blood in the priming of cardiopulmonary bypass solution for pediatric patients.
J Thorac Cardiovasc Surg. 2004 Apr; 127(4):949-52.
(SURGERY, 14/199, IF 3.406, Cited 24)

8. **Amir G**, Rubinsky B, Horowitz L, Miller L, Leor J, Kassif Y, Mishaly D, Smolinsky AK, Lavee J.
Prolonged 24-hour subzero preservation of heterotopically transplanted rat hearts using antifreeze proteins derived from arctic fish.
Ann Thorac Surg. 2004 May; 77(5):1648-55.
(SURGERY, 13/199, IF 3.741, Cited 14)

9. **Amir G**, Horowitz L, Rubinsky B, Sheik Yousif B, Lavee J, Smolinsky AK.
Subzero nonfreezing cryopreservation of rat hearts using antifreeze protein I and antifreeze protein III.
Cryobiology. 2004; 48: 273-282.
(BIOLOGY 26/85, IF 2.062, Cited 14)

10. Ikai A, Riemer RK, Ramamoorthy C, Malhatra S, Cassorla L, **Amir G**, Hanley FL, Reddy VM.
Preliminary results of fetal cardiac bypass in nonhuman primates.
J Thorac Cardiovasc Surg. 2005; 129(1):175-81.
(SURGERY, 14/199, IF 3.406, Cited 13)

11. **Amir G**, Rubinsky B, Basheer SY, Horowitz L, Jonathan L, Feinberg MS, Smolinsky AK, Lavee J.
Improved viability and reduced apoptosis in sub-zero 21-hour preservation of transplanted rat hearts using anti-freeze proteins.
J Heart Lung Transplant. 2005; 24(11):1915-29.
(TRANSPLANTATION 3/24, IF 4.332, Cited 15)

12. Riemer RK, **Amir G**, Reichenbach SH, Reinhartz O.
Mechanical support of total cavopulmonary connection with an axial flow pump.
J Thorac Cardiovasc Surg. 2005 Aug;130(2):351-4.
(SURGERY, 14/199, IF 3.406, Cited 15)

13. Chock V, **Amir G**, Davis CR , Riemer K, Ramamoorthy C, Giffard, RG, Reddy VM.
Antegrade Cerebral Perfusion Reduces Apoptotic Neuronal Injury in a Neonatal Piglet Model of Cardiopulmonary Bypass with Deep Hypothermic Circulatory Arrest.
J Thorac Cardiovasc Surg. 2006; 131(3):659-65.
(SURGERY, 14/199, IF 3.406, Cited 12)
14. Heninger C, Ramamoorthy C, **Amir G**, Kamra K, Reddy VM, Hanley FL, Brock-Utne JG.
Esophageal Saturations during antegrade cerebral perfusion: a preliminary study using visible light spectroscopy.
Pediatric Anesthesia. 2006; 16(11):1133-7.
(PEDIATRICS 34/115, IF 2.100, Cited 2)
15. **Amir G**, Ramamoorthy C, Riemer RK, Hanley FL, Reddy VM.
Visual Light Spectroscopy Reflects Flow Related Changes in Brain Oxygenation During Regional Low Flow Perfusion and Deep Hypothermic Circulatory Arrest.
J Thorac Cardiovasc Surg. 2006; 132(6):1307-1313.
(SURGERY, 14/199, IF 3.406, Cited 9)
16. **Amir G**, Ma X, Reddy VM, Hanley FL, Reinhartz O, Ramamoorthy C, Riemer RK.
Dynamics of human myocardial progenitor cell populations in the neonatal period.
Ann Thorac Surg. 2008 Oct;86(4):1311-9.
(SURGERY, 13/199, IF 3.741, Cited 14)

17. Bruckheimer E, Dagan T, **Amir G**, Birk E.
Covered Cheatham-Platinum stents for serial dilation of severe native aortic coarctation.
Catheter Cardiovasc Interv. 2009 Jul 1;74(1):117-23.
(CARDIAC & CARDIOVASCULAR SYSTEMS 54/117, IF 2.290, Cited 10)
18. **Amir G**, Miller L, Shachar M, Feinberg MS, Holbova R, Cohen S, Leor J.
Evaluation of a peritoneal-generated cardiac patch in a rat model of heterotopic heart transplantation.
Cell Transplant. 2009;18(3):275-82.
(for 2010: TRANSPLANTATION 1/25, IF 6.204, Cited 13) (No IF for 2011, Cited 13)
19. **Amir G**, Chandra Ramamoorthy R. Kirk Riemer, Frank L Hanley, V. Mohan Reddy MD.
Deep Brain Hyperthermia While Re-Warming From Hypothermic Circulatory Arrest.
Journal of Cardiac Surgery. 2009;24:606-610.
(SURGERY 147/199, IF 0.865, Cited 3)
20. **Amir G**, Georgy Frenkel, Elhanan Bruckheimer, Tamir Dagan, Jacob Katz, Michael Berant, Bernardo Vidne, Einat Birk.
Anomalous origin of Pulmonary Artery from the Aorta – Early Diagnosis and Repair Leading to Immediate Physiologic Correction.
Cardiology in the Young. 2010; 20:654-659.
(PEDIATRICS 95/115, IF 0.759, Cited 0)

21. Nahum E, Dagan O, Lev A, Shukrun G, **Amir G**, Frenkel G, Katz J, Michel B, Birk E.

Favorable outcome of pediatric fulminant myocarditis supported by extracorporeal membranous oxygenation.

Pediatr Cardiol. 2010 Oct;31(7):1059-63.

(PEDIATRICS , 65/115, IF 1.298, Cited 2)

22. **Amir G**, Frenkel G, Shukrun G, Gogia G, Bachar O, Bruckheimer E, Katz J, Birk E.

Direct Innominate Artery Cannulation for Antegrade Cerebral Perfusion in Neonates Undergoing Arch Reconstruction.

Ann Thorac Surg. 2012 Dec 19. Epub ahead of print]

(SURGERY, 13/199, IF 3.741, Cited)

B.1. Articles Accepted

1. Bruckheimer E, Dagan T, **Amir G**, Birk E.

Staged Transcatheter Treatment of Portal Hypoplasia in Congenital Porto-systemic Shunts in Children.

Cardiovascular and interventional Radiology. 2013.

(RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING, 46/116, IF 2.093, Cited)

2. Averbuch N, Birk E, Frenkel G, , Gogia o, Manor-Shulman O, Bruckheimer E, Nachum E, **Amir G** .

Percutaneous Intra-peritoneal catheters in neonates following open heart surgery.

Journal of Intensive Care medicine. 2013.

(Ranked by SJR 12/54 in Intensive Care Category, No IF by Thomson Reuters)

3. Nahum E, Pollak U, Dagan O, **Amir G**, Frenkel G, Birk E.
Predictive value of B-type natriuretic peptide level on the postoperative course of infants with congenital heart disease.
IMAJ. 2013.
(MEDICINE, GENERAL & INTERNAL , 83/155, IF 1.018, Cited)

Case Reports

1. Mishaly D, Hegesh J, Frand M, Smolinsky A, **Amir G**.
Unintended right-to-left shunt after Fontan operation: consequence of unligated vertical vein in a child with total anomalous pulmonary venous drainage, single ventricle, and heterotaxy.
J Thorac Cardiovasc Surg. 2003 Feb; 125(2):421-3.
(SURGERY, 14/199, IF 3.406, Cited 0)
2. **Amir G**, Asaad Khoury, Avraham Lorber, David Mishaly.
Extracardiac reconstruction of anomalous superior systemic venous return.
Interactive Cardiovascular and Thoracic Surgery. 2004; 3: 328-330.
(No IF, Cited)
3. Frenkel G, Birk E, Vidne B, Shukrun G, Bachar O, Katz Y, **Amir G**.
A word of caution: Cerebral air emboli caused by tubing elastic recoil while performing low-flow antegrade cerebral perfusion in a low-birth-weight neonate.
J Thorac Cardiovasc Surg. 2010 Feb;139(2):e25-6.
(SURGERY, 14/199, IF 3.406, Cited 0)

Review Articles

1. **Amir G**, Ramamoorthy C, Riemer RK, Reddy VM, Hanley FL.
Neonatal brain protection and deep hypothermic circulatory arrest:
pathophysiology of ischemic neuronal injury and protective strategies.
Ann Thorac Surg. 2005; 80: 5:1955-64.
(SURGERY, 13/199, IF 3.741, Cited 32)

Invited talks at scientific meetings

1. Early Surgical treatment of Discrete Sub-Aortic Stenosis.
Talk given at The 54th Annual meeting of the Israel Heart Society
April 2007.
2. Neonatal Left Ventricular Outflow Tract Obstruction –
Decision Making Algorithm and Management
Talk given at the 6th International Congresses of Cardiology by
Internet. Argentina September 1st to October 30th.
3. What is the Conduit of Choice for Right Ventricular Outflow Tract
Reconstruction. 1st RVOT Stenosis- surgical and interventional
solutions summit , January 2013 Hertzlia.

Papers Presented at Scientific Meetings

1. Yaron Moshkovitz, H Hod , **Amir G**, R Mohr.
Coronary artery bypass without cardiopulmonary bypass for patients with acute myocardial infarction.
44th Annual scientific session of the American College of Cardiology 1995, New Orleans USA.

2. Yaron Moshkovitz, H Hod ,**Amir G**, R Mohr .
Coronary artery bypass without cardiopulmonary bypass for patients with acute myocardial infarction.
Annual meeting of the Israel Heart Society, Tel Aviv, Israel ; April 1995.

3. Yaron Moshkovitz, Y Zhorl, **Amir G**, AK Smolinski ,R Mohr.
CABG without extracorporeal circulation: A low risk alternative for patients with acute myocardial infarction.
5th World Congress of the International Society of Cardiothoracic Surgeons.Hiroshima. Japan; July 1996.

4. Yaron Moshkovitz , **Amir G**, AK Smolinski, R Mohr, N Savion ,D Varon,R Dardik , J Lavee.
Modified ultrafiltration improves primary hemostasis and reduces blood loss following cardiopulmonary bypass.
5th World Congress of the International Society of Cardiothoracic Surgeons. Hiroshima Japan ;July 1996.

5. Yaron Moshkovitz , **Amir G**, L Sternik, Z Vered S Reeisner, AK Smolinsky.
Ascending aorta replacement with aortic valve repair.
9th Annual meeting , Mediterranean Association of Cardiology and Cardiac Surgery, Tel Aviv Israel; October ;1996.

6. Yaron Moshkovitz, Y Zhor A Shinfeld, **Amir G**, L Sternik, J Lavee B Beker ,MS Feinberg ,Z Vered AK Smolinsky.
Echocardiographic guidance for aortic root remodeling in ascending aortic aneurysm /dissection with aortic valve incompetence.
Annual meeting of the Israel Heart Society, Jerusalem; April 1997.

7. **Amir G**,Y Paz, Yaron Moshkovitz, AK Smolinsky.Triangular resection (Mcgoon repair) with mitral annuloplasty - a simple and effective alternative to sliding annuloplasty.
Annual meeting of the Israel Heart Society, Jerusalem; April 1997.

8. **Amir G**, Cohen Y, Paz, B Moses , J Lavee.
Risk factors for supra ventricular tachyarrhythmias after coronary artery bypass surgery : results of the Israeli CABG study.
Annual meeting of the Israel Heart Society, Jerusalem ; April 1997

9. **Amir G**, M Feimberg, Z Raviv , M Golan, AK Smolinsky.
Posterior annuloplasty versus rigid ring annuloplasty in repairing the mitral valve-avoiding subaortic gradients.
Annual meeting of the Israel Heart Society, Jerusalem; April 1998.

10. **Amir G**, R Bilik , J Kuint , AK Smolinsky, I Avigad.
Conservative treatment of esophageal perforations in very low birthweight neonates.
Second International Congress of Thorax Surgery. Bologna Italy June 1998.

11. **Amir G**, B Rubinsky M Eldar, M Scheinovitz A K Smolinsky and J Lavee.
Prolonging ischemic times in rat heart transplantation, by controlling cooling to 0 degrees.
Annual meeting of the Israel Heart Society, Tel Aviv; April 2000.

12. **Amir G**, Boris Rubinsky, Yigal Kassif, Liana Horowitz, Aram.K Smolinsky and Jacob Lavee.
Mimicking Nature's Techniques of Freeze Tolerant Fish and Amphibians in Transplanted Mammalian Hearts Cryopreserved at Subzero Temperatures Using Antifreeze Proteins or High Concentrations of Glucose and Insulin.
The 49th Annual meeting of the Israel Heart Society, April 2002.

13. Michael Fainblut, **Amir G**, Yigal Kassif, Jacob Lavee, and Aram K. Smolinsky.
Preoperative Treatment with ACE Inhibitors is not an Independent Risk Factor for the Development of Acute Renal Failure Following Coronary Bypass Surgery.
The 49th Annual meeting of the Israel Heart Society April 2002.

14. **Amir G**, Boris Rubinsky, Yigal Kassif, Aram.K Smolinsky and Jacob Lavee. Preservation of myocyte structure and mitochondrial integrity in subzero cryopreservation of mammalian hearts for transplantation using antifreeze proteins - an electron microscopy study.
16th Annual meeting of the European Association of Cardio-Thoracic Surgery, Monaco, September 2002.

15. **Amir G**, Liron Miller, Micha S Feinberg, Jacob Lavee, Aram K Smolinsky, Boris Rubinsky, Zeev Rotstein, , Smadar Cohen, Jonathan Leor.
A novel small animal model to evaluate the performance of tissue engineered cardiac muscle using biograft grown in the peritoneal cavity and heterotopic heart transplantations.
American Heart Congress, November 2002, Chicago Illinois.

16. **Amir G**, Boris Rubinsky, Yigal Kassif , Liana Horowitz , Aram K Smolinsky ,and Jacob Lavee .
Prolonged 24 hour preservation of heterotopically transplanted rat hearts using antifreeze proteins derived from arctic fish.
Congress of the Society of Thoracic Surgeons, January 2003, San Diego ,California.

17. **Amir G**, B. Rubinsky, B. Sheick Yousif , L. Horowitz, J. Leor , M. S. Feinberg , A. K. Smolinsky, J. Lavee.
Improved Viability and Reduced Apoptosis in subzero 21 Hour preservation of Transplanted Rat Hearts Using Antifreeze Proteins.
Annual Meeting of the International Society of Heart and Lung Transplantation. San Francisco, April 2004.
18. Chock VY, **Amir G**, Davis CR, Riemer K, Giffard RG, Ramamoorthy C, Hanley FL, Reddy VM. Antegrade Cerebral perfusion Improves Neurologic outcome in a Neonatal Piglet Model of Cardiopulmonary Bypass with Deep Hypothermic Circulatory Arrest.
Annual Meeting of the American Academy of Pediatrics, October 2004, San Francisco.
19. **Amir G**, Ramamoorthy C, Riemer RK, Hanley FL, Reddy VM Deep brain hyperthermia routinely occurs during re-warming from cardiopulmonary bypass.
Annual Meeting of the society of Thoracic Surgeons, 2005 Tampa , Florida.
20. **Amir G**, Ramamoorthy C, Riemer RK, Hanley FL, Reddy VM. Visual Light Spectroscopy Reflects Flow Related Changes in Brain Oxygenation During Regional Low Flow Perfusion and Deep Hypothermic Circulatory Arrest.
Annual Meeting of the Western Thoracic Surgical Association 2005, Victoria, Canada.

21. **Amir G**, Georgy Frenkel, Elchanan Bruckheimer, Rami Fogelman Yakov Katz, Michel Berant, Bernardo Vidne, Einat Birk.
Surgical Management of Left Ventricular Outflow Tract Obstruction (LVOTO) in Children- The Schneider Medical Center Experience.
The 54th Annual meeting of the Israel Heart Society April 2007.
22. **Amir G**., Chandra Ramamoorthy, M.D., Kirk K. Riemer, Ph.D., Corrine R. Davis, Ph.D., Frank L Hanley M.D., V. Mohan Reddy, M.D.
Flow and Temperature Management during Regional Low Flow Perfusion and Deep Hypothermic Circulatory Arrest
The 54th Annual meeting of the Israel Heart Society April 2007.
23. **Amir G**, G. Frenkel , J. Katz , T. Dagan , B. Vidne , E. Bruckheimer , E. Porat , M. Berant , E. Birk.
Surgery for Aortic Coarctation in the Neonate : Results of Extended Arch Reconstruction Using either Left Thoracotomy or Mid-sternotomy.
The 56th Annual meeting of the Israel Heart Society April 2009.
24. **Amir G**, G. Frenkel , J. Katz , T. Dagan , E. Bruckheimer , M. Berant , B. Vidne , E. Porat , E. Birk
Single Stage Repair of Aortic Coarctation and Ventricular Septal Defects in Neonates.
The 56th Annual meeting of the Israel Heart Society April 2009.

Poster Presentations

1. I Ostfeld, **Amir G**, I. S Engelberg, A Gerniek , A .K. Smolinsky.
Late complications of gelatine -resorcine-formaldehyde (GRF) in aortic surgery.
The first International Congress of Thorax Surgey, 1998, Athens, Greece.
2. **Amir G**, A. Vardi , Z. Barzilay . A Machmud , R .Bilik ,G . Paret, J . Hagesh A.K.Smolinsky.
ECMO- Extracorporeal membrane oxygenation as a bridge to recovery following surgery for complex congenital cardiac anomalies in children and neonate.
Annual meeting of the Israel Heart Society, Tel Aviv; April 1999. |
3. **Amir G**, B Rubinsky M Eldar, M Scheinovitz A K Smolinsky and J Lavee.
Lowering and controlling preservation temperatures at 0 degrees C, prolongs ischemic times and improves hemodynamic performance in rat heart transplantation.
49th International Congress of the European Society for Cardiovascular Surgery, Dresden Germany, June 2000.
4. **Amir G**, B Rubinsky, Y Kassif ,L Horowitz ,M Eldar, M Scheinovitz , A K Smolinsky and J Lavee.
Subero cryopreservation of mammalian hearts using antifreeze proteins derived from arctic fish and freeze tolerant insects.
European Association of Cardiothoracic surgery and European Society of thoracic Surgery Joint Meeting, Lisbon, Portugal, September 2001.

5. **Amir G**, B Rubinsky, A K Smolinsky and J Lavee
Successful Use of Ocean Pout Thermal Hysteresis Protein (Antifreeze Protein III) in Cryopreservation of Transplanted Mammalian Hearts at Subzero Temperatures.
The International Society of Heart and Lung Transplantation, 22nd Annual Meeting and Scientific Sessions. April 2002 Washington D.C.

6. **Amir G**, Frenkel G, Shukrun G, Gogia O, Bachar O, Bruckheimer E, Katz J, Birk E.
Direct Innominate Artery Cannulation in Neonates Undergoing Arch Reconstruction.
6th World Congress of Cardiology and Cardiac Surgery , South Africa , February 2013.

7. Averbuch N, Birk E, Frenkel G, Gogia O, Manor–Shulman O, Bruckheimer E, Nachum E, **Amir G**.
Percutaneous Intraperitoneal Catheters in Neonates Following Open Heart Surgery.
6th World Congress of Cardiology and Cardiac Surgery , South Africa , February 2013.