

DAFTAR PUSTAKA

- Acuto O, Cantrell D. T cell activation and the cytoskeleton. *Annu Rev Immunol* 2000;18:165e84.
- Adhi, Kresno C. Kadar Human Leukocyte Antigen – G dan Tumor Nekrosis Faktor Alpha serum Ibu Pada Abortus dan Kehamilan Normal. 2014
- Anderson DJ, Hill JA, Haimovici F, Berkowitz RS. Adverse effects of immune cell products in pregnancy. In: Wegmann TF, Gill TJ, Nisbet-Brown E, editors. *Molecular and cellular immunobiology of the maternalefetal interface*. New York: Oxford University Press; 1991. p. 207e36.
- Andersen MJ, Lorntzen B, Henriksen T. Increased lipolytic activity and high ratio free fatty acids to albumin in sera from women with preeclampsia leads to triglyceride accumulation in cultured endothelial cells. *Am J Obstet Gynecol*. 1992;167:440-7.
- Athanassakis I and Vassiliadis S. Interplay Between T helper type 1 and type 2 cytokines and soluble major histocompatibility complex molecules : a paradigm in pregnancy. *Immunology* 2002. 107:281-287
- Alberman E. *Early pregnancy loss: mechanisms and treatment*. London: RCOG; 1998.
- Azizieh FY, Raghupathy RG. 2015. Tumor Necrosis Factor- α and Pregnancy Complications: A Prospective Study. *Med Princ Pract* 24, 165–170.
- Barnea ER. Insight into early pregnancy: emerging role of the embryo *Am J Reprod Immunol*. 2004;51:319-22.
- Bates MD, Quenby S, Takakuwa & Johnson PM, Vince GS. Aberrant cytokine production by peripheral blood mononuclear cells in recurrent pregnancy loss. *Hum Reprod*. 2002;17:2439-44.
- Bajo J, Haya J, Perez-Medina T. U.S. prediction of miscarriage. 5th World Congress of Perinatal Medicine. Barcelona: World Association of Perinatal Medicine; 2001
- Barrington JW, Lindsay P, James D, Smith S, Roberts A. Selenium deficiency and miscarriage: a possible link? *BJOG*. 1996;103:130-2.
- Basiad A, Sumapraja K, dan Santoso B. Panduan tatalaksana keguguran berulang, HIFERI-POGI, 2011

- Berger DS, Hogge WA, Barmada MM, Ferrell RE. 2010. *Comprehensive analysis of HLA-G: Implications for recurrent spontaneous abortion*. Reproductive series: 17:331-338.
- Bhalla A, Stone PR, Liddell HS, Zanderigo A, Chamley LW. 2006. *Comparison of the expression of human leukocyte antigen (HLA)-G and HLA-E in women with normal pregnancy and those with recurrent miscarriage*. Hum Reprod: 131:583-589.
- Caniggia I, Mostachfi H, Winter J, Gassmann M, Lye SJ, Kuliszewski M. Hypoxia inducible factor-1 mediates the biological effects of oxygen on human trophoblast differentiation through TGF beta. J Clin Invest. 2000;105:577-87.
- Carthy AL, Woolfson RG, Raju SK, Poston L. Abnormal endothelial cell function of resistance arteries from women with preeclampsia. Am J Obstet Gynecol. 1993;168:132-40.
- Carswell E, Old L, Kassel R dkk. An Endotoxin-Induced Serum Factor that Causes Necrosis of Tumors. Proceedings of the national Academy of Science. 1975. 72 (9) : 3666-70
- Christiansen OB. Epidemiology of recurrent pregnancy loss. Dalam: Carp HJA, editor. Recurrent pregnancy loss causes, controversies and treatment. Edisi ke-1. London: Informa Healthcare; 2007. h. 1-13.
- Clark, D.A. 1998. Alloimmunity and pregnancy loss. in: N Gleicher, (Ed.) Principles and practice of medical therapy in pregnancy. Appleton & Lange, Stamford, Conn; 1998: 511–521
- Clark DA, Ding JW, Chaouat G dkk. Unexplained Sporadic and Recurrent miscarriage in the New Millenium : a critical analysis of immune mechanisms and treatments. Hum. Reprod. update. 2001,7, 501-11
- Craig PG, John H, Tomas BG and Anthony AD. Management of Spontaneous Abortion. American Family Phy. October 2005, Vol 7, Num 7: 1243:50
- Coste J, Job-Spira N, Fernandez H. Risk factors for spontaneous abortion: a case-control study in France. Hum Reprod. 1991;6:1332-7.
- Cunningham FG, Leveno KJ, Bloom SL, Hauth JC, Gilstrap III LC, Wenstrom KD. Williams obstetrics. Edisi ke-24. New York: McGraw Hill; 2014.

- Cheng Cl, Agoestina T, Harbin. Maternal mortality at twelve teaching hospital in Indonesia, An epidemiology analysis. *Int J Gynecol Obstet.* 1981;19:260-7.
- Daya S. Clark DA. 2004. *Pregnancy and the fetel-maternali relationship.* Daiam: Sigal LH, Ron Y. (ed). *Immunology and Inflammation Basic mechanism and clinical consequences.* New York: McGraw-Hill, Inc.,: 547-62.
- Darwin Eryati. *Imunologi dan Infeksi.* Andalas Univercity. Padang. 2006
- DeChatelet LR. Oxidative bactericidal mechanisms of polymorphonuclear leukocytes. *J Infect Dis.* 1995;131:295-303.
- De la Rochebrochard E,Thonneau P. Paternal age and maternal age are risk factors for miscarriage; results of a multicentre European study. *Hum Reprod* 2002;17:1649–56.
- Durmanova V, Hormolova M, Drobny J, Shawkatova I, Buc M. 2013. Role of HLA-G and other immune mechanisms in pregnancy. *Cent Eur J Biol*, 8(3), 226-239
- Ellis, S.A., Sargent, I.L., Redman, C.W. et al. Evidence for a novel HLA antigen found on human extravillous trophoblast and a choriocarcinoma cell line. *Immunology*, 1986, 59, 595-601.
- Fatih G, Petek B, Mahmut Y,*dkk.* Maternal serum levels of tumor necrosis factor- α and interleukin-2 receptor in threatened abortion : a comparison with normal and pathologic pregnancies. *Fertility and sterility.*2001;76:707-11.
- Fortunato, S.J., Menon, R., Lombardi, S.J., 2001. Support for an infection induced apoptotic pathway in human fetal membranes. *Am. J. Obstet. Gynecol.* 184, 1392–1398.
- Garcia-Lloret, M.I., Winkler-Lowen, B., Guilbert, L.J., 2000. Monocytes adhering by LFA-1 to placental syncytiotrophoblasts induce local apoptosis via release of TNF . A model for hematogenous initiation of placental inflammations. *J. Leukoc. Biol.* 68, 903–908.
- Goldstein P, Berrier J, Rosen S, Sacks HS, Chalmers TC. A meta-analysis of randomised control trials of progestational agents in pregnancy *BJOG.* 1989;96:265-74.
- Gucer F, Kaplan PB, Yu“ksel M, Sayin C, Yu“ce MA, Yardim T. 2001. Maternal serum levels of tumor necrosis factor– α and interleukin-2

- receptor in threatened abortion: a comparison with normal and pathologic pregnancies. *Fertility and sterility*, vol 76, no.4, 707-711.
- Hikok LR. Hysteroscopic treatment of the uterine septum: a clinician's experience. *Am J Obstet Gynecol*. 2000;182:414-20.
- Hakim RB, Gray RH, Zacur H. Infertility and early pregnancy loss. *Am J Obstet Gynecol*. 1995;172:1510-7.
- Hammer A, Blaschitz A, Daxbock C, Walcher W, Dohr G. Fas and Fas-ligand are expressed in the uteroplacental unit of first-trimester pregnancy. *Am J Reprod Immunol* 1999;41: 41e51.
- Hehlgans, T., Pfeffer, K., 2005. The intriguing biology of the tumour necrosis factor/tumour necrosis factor receptor superfamily: players, rules and the games. *Immunology* 115, 1–20.
- Hunt JS, Jadhav L, Chu W, Gerathy DE, Ober C. 2003. *Soluble HLA-G circulates in maternal blood during pregnancy*. *Am J Obstet Gynecol*: 682-688.
- Hunt JS, Petroff MG, McIntire RH, Ober C. 2005. *HLA-G and immune tolerance in pregnancy*. *Faseb Journal*: 19:681-693.
- Hunt JS, Langat DL. *HLA-G: a human pregnancy-related immunomodulator*. *Current opinion in pharmacology*: 9: 2009; 462-469.
- Imudia AN, Suzuki Y, Kilburn BA, Yelian FD, Diamond MP, Romero R et al. 2009. Retrieval of trophoblast cells from the cervical canal for prediction of abnormal pregnancy: a pilot study. *Hum Reprod.*, 24(9):2086-92
- Jenkins C, Wilson R, Roberts J, Miller H, McKillop JH, Walker JJ. Antioxidants: their role in pregnancy and miscarriage. *Antioxid Redox Signal*. 2000;24:623-8.
- Jauniaux E, Kaminopetros P, El-Rafaey H. Early pregnancy loss. Dalam: Rodeck CHWM, editor. *Fetal medicine: basic science and clinical practice*. London: Churchill Livingstone; 1999. h. 835-47.
- Jenkins C, Roberts J, Wilson R, MacLean MIA, Shilito J, Walker IJ. Evidence of a TH 1 type response associated with recurrent miscarriage? . *Fertil Steril*. 2000;73:1206-8.
- Julia SB. Immunological Relationship Between The Mother and The Fetus. *Intern. Rev. Immunol*. 2002, 21: 471-95

- Juriscova A, Casper RF, MacLusky NJ, Mills GB, Librach CL. 2003. *HLA-G expression during preimplantation human embryo development*. *Development Biology*: 93:161-165.
- Jones E, Stuart D, Walker N. Structure of Tumor Necrosis Factor. *Nature*. 1989. 338 : 225-28
- Joost J.O. MD. *Cytokines in Medical Immunology*. 9ed. Appleton and Lange, USA 1997 ;146-52.
- Jivraj S, Makris M, Saravelos S, Li TC. Pregnancy outcome in women with factor V Leiden and recurrent miscarriage. *BJOG* 2009;116:995–8.
- Kurniadi A. 2005. Perbedaan kadar TNF- α pada abortus dan kehamilan normal. *Bagian Obstetri dan Ginekologi Fakultas Kedokteran Universitas Padjadjaran*.
- Kupesic S, Matijevic R, Kurjak A. Early pregnancy loss. Dalam: Kurjak AC, Carrera JM, editor. *The embryo as a patient*. New York: The Parthenon Publishing Group; 2001. h. 70-80.
- Kumar KS, Kumar A, Prakash S, Swamy K, Jagadeesan V, Jyothy A. The role of selenium in recurrent pregnancy loss. *J Obstet Gynecol*. 2002;22:181 -3.
- Kumar V, Medhi B. 2008. Emerging Role Of Uterine Natural Killer Cells In Establishing Pregnancy, *The Iranian Journal Of Immunology*, PublishH By The Iranian Society Of Immunology & Alergy And Shiraz Institute For Cancer Research, Vol.5 No.2, 71-81.
- Kwak-Kim, J.Y., Gilman-Sachs, A., Kim, C.E., 2005. T helper 1 and 2 immune responses in relationship to pregnancy, nonpregnancy, recurrent spontaneous abortions and infertility of repeated implantation fail- ures. *Chem. Immunol. Allergy* 88, 64–79.
- Lim KJH, Odukoya OA, Li TC and Cooke ID. Cytokines and Immunoendocrine Factors in Recurrent Miscarriage. *Human Reproduction Update*. 1996, Vol 2, NO 6 : 469-481
- Lim KJH, Olusegun A, Ajjan RA, Li TC, Weetman AP, Cook ID. The role of T helper cytokines in human reproduction. *Fertil Steril*. 2006;73:136-42.
- Li S, Hased S, Mulvihill JJ. Double trysomy. *Am J Med Genet*. 2004;124:96-8.

- Leftherioti MV. Immunobiology of recurrent miscarriage. Dalam: Chamberlain HJ, editor. Recurrent pregnancy loss causes controversies and treatment. London: Informa Healthcare; 2007. h. 165-92.
- Luisi S, Lazzeri L, Genazzani AR. Endocrinology of pregnancy loss. Dalam: Steer PJ, editor. Recurrent pregnancy loss causes, controversies and treatment. London: Informa Healthcare; 2007. h. 79-87.
- Makhseed M, Raghupathy R, Azizieh F, Omu A, Al Shamali E, Ashkanani L. Th1 and Th2 cytokine profile in recurrent aborters with successful pregnancy and with subsequent abortions. Hum Reprod. 2001;16:2219-26.
- Makhseed M, Raghupathy R, Azizieh F, *dkk.* Th1 and TH2 cytokine profiles in recurrent aborters with successful pregnancy and with subsequent abortion. Hum. Reproduction 2001;16:2219-26.
- Makkar G, Ernest H.Y.Ng, William S. B. Yeung, And P.C.Ho. 2006. Reduced Expression Of Interleukin-11 And Interleukin-6 In The Periimplantation Endometrium Of Excessive Ovarian Responders During In Vitro Fertilization Treatment, The Journal Of Cilical Endocrinology And Metabilism, 3181-3188.
- Matalliotakis I, Neonaki M, Giannakopoulou C, Goumenou A, Hasan E, Koumantakis E. Immunologic variables in normal pregnancy and spontaneous abortion. Int J Fertil Womens Med 1998;43:262-6
- Miyakis S, Lockshin MD, Atsumi T, Branch DW, Brey RL, Cervera R, et al. International consensus statement on an update of the classification criteria for definite antiphospholipid syndrome (APS). *J Thromb Haemost* 2006;4:295–306.
- Moffet A, Loke YM. The immunological paradox of pregnancy; a reapraisal. Placenta. 2004:1-8.
- Mubarak AR, Blebu IS, Mumuni K, Tettey Y, Gyasi RK, Adjei AA et al. 2016. Soluble Human Leukocyte Antigen-G Expression in Pregnancy Success and Early Pregnancy Loss in Korle-Bu Teaching Hospital. Open Journal of Immunology, vol 6, 1-6
- Murine L, Geva E, Amit A, Lerner G, Lessing JB. Autoimmunity and reproduction. Fertil Steril. 2003;67:599-611.
- Miller H, Wilson R, Jenkins C, MacLean MA, Roberts J, Walker JJ.

Glutathione and miscarriage. *Fertil Steril*. 2000;74:1257-8.

Nybo Anderson AM, Wohlfahrt J, Christens P, Olsen J, Melbye M. Maternal age and fetal loss: population based register linkage study. *BMJ* 2000;320:1708–12.

Nicoll AE, Norman J, Macpherson A, Acharya U. Association of reduced selenium status in the aetiology of recurrent miscarriage. *BJOG*. 1999;106:1188-91.

Nicolaos V, Constantinos P, Emmanuel E, *et al*. Elevated circulating IL-1 β and TNF- α , and unaltered IL-6 in first trimester pregnancies complicated by threatened abortion with an adverse outcome. *Pubmed central. Mediators Inflamm*. 2006

Ogasawara M, Aoki K, Okada S, Suzumori K. Embryonic karyotype of abortuses in relation to the number of previous miscarriages. *Fertil Steril* 2000;73:300–4.

Olivares EG, Munoz R, Tejerizo G, Montes, Gomez MF, Abadia MA. Decidual lymphocytes of human spontaneous abortions induce apoptosis but not necrosis in JEG-3 extravillous trophoblast cells. *Biol Reprod*. 2002;67:1211-7.

Pellestor F, Anahory T, Hamamah S. The chromosomal analysis of human oocytes. An overview of established procedures. *Hum Reprod*. 2005;11:15-32.

Piccinni MP, Romagnani S. Regulation of fetal allograft survival by hormone controlled Th1 and Th2 type cytokines. *Immunol Res*. 1996;1:141-50.

Piccinni MP, Scaletti C, Maggi E, Romagnani S. Role of hormone controlled Th1 and Th2 type cytokines in successful pregnancy. *J Neuroimmunol*. 2000;109:30-3.

Porcu G, Carvello L, D'ercole G, Cohen D, Roger V, de Motgolfier R, *et al*. Hysteroopic metroplasty for separate uterus and repetitive abortions: reproductive outcome. *Eur J Obs Gyn Rep Biol*. 2000;88:81-4.

Peakman M, Vergani D. Basic and clinical immunology. New York: Churchill Livingstone. 1997.

Rosevear S. Bleeding in early pregnancy. Dalam: James DKSJ, Weiner CP, Gonik B, editor. High risk pregnancy management options. Edisi ke-2. London: WB. Saunders; 2000. h. 61-89.

- Raghupathy R, Makhseed M, Azizieh F, *dkk*. Cytokine production by maternal lymphocytes during normal human pregnancy and in unexplained recurrent spontaneous abortion. *Hum. Reproduction* 2000;15:713-18.
- Raghupathy R: Th1-type immunity is incompatible with successful pregnancy. *Immunol Today* 1997; 18:478–482.
- Raghd M. Jassem, Wafaa Sadoon Shani, *et al*, HLA-G polymorphisms and soluble HLA-G protein levels in women with recurrent pregnancy loss from Basrah province in Iraq. *American Society for Histocompatibility and Immunogenetics* 2012; 811-817
- Redman, CW., McMichael, AJ., Stirrat, G.M. *dkk*. Class 1 major histocompatibility complex antigens on human extra-villous trophoblast. *Immunobolgy* 1984; 52, 457-468.
- Rosenthal M, Bain SH, Bush A, Warner JO. Weight/height as a screening test for obesity shoolage children. *Eur J Pediatr.* 1994;153:876-83.
- Rouas-Freiss N, Goncalves RM, Menier C *et al*. Direct evidence to support the role of HLA-G in protecting the fetus from maternal uterine natural killer cytolysis. *Proc Natl Acad Sci USA* 1997;94:11520–5.
- Sarwono, *Kelainan lamanya kehamilan, Ilmu Kebidanan.* 2014; 302-312
- Shaarawy M, Nagui AR. Enhanced expression of cytokines may play fundamental role in the mechanisms of immunologically mediated recurrent spontaneous abortion. *Acta Obstet Gynecol Scand* 1997;76:205-11
- Scott J, Rote N, Branch D. Immunologic aspects of recurrent abortion and fetal death. *Obstet Gynaecol.* 1987;70:645-56.
- Sarah AR, Alison SC, Rebecca JS. Interleukin 10 regulates inflammatory cytokine synthesis to protect against lipopolysaccharide-induced abortion and fetal growth restriction in mice. *Biology Of Reproduction.* 2007;76:738-48
- Szabo I, Szilagyi A. Prevention and treatment of early pregnancy loss. 5th World Congress of Perinatal Medicine. Barcelona: World Association of Perinatal Medicine; 2001.
- Tabiasco J, Parinaud J, Bouteiller PL. 2007. *Soluble HLA-G and embryo implantation.* *Gynecol Obstet Invest:* 64:134-137.

- Ugwumadu A. Bacterial vaginosis in pregnancy. *Curr Opin Obstet Gynecol.* 2002;14(2):115-8.
- Vives A, Balasch J, Yague J, Quinto L, Ordi J, Vanrell JA. Type-1 and type-2 cytokines and human decidual tissue and trophoblasts from normal and abnormal pregnancies detected by reverse transcriptase polymerase chain reaction (RT-PCR). *Am J Reprod Immunol.* 1999;42:361-8.
- Vassiliadis S, Ranella A, Papadimitriou L, Makrygiannakis A, Athanassakias V. Serum level of pro-and anti-inflammatory cytokines in non-pregnant women, during pregnancy, labour and abortion. *Mediators Inflamm* 1998;7:69-72
- Veenstra AL, Heineman MJ, Faas MM. 2003. *The immunology of succesful pregnancy.* *Human reproduction update:* 9(4):347-357.
- Walia GK, Rupak M, Saraswathy KN, Puri M and Chahal MS. Immuno-Molecular Etiology of Recurrent Pregnancy loss and the Anthropological Perspective. *Int J Hum Genet.*2008. 8(1-2):227-35
- Wang JX, Davies MJ, Norman RJ. Obesity increases the risk of spontaneous abortion during infertility treatment. *Obes Res.* 2002;10:551-4.
- Wibowo A. 2015. Perbedaan serum MMP9 dan TNF- α pada kehamilan preterm dan ketuban pecah dini. Bagian Obstetri dan Ginekologi Fakultas Kedokteran Universitas Sebelas Maret.
- Wilson R. Antioxidants and miscarriage. Dalam: Wilson W, editor. *Recurrent abortus and preeclampsia the roles played by the immune system and antioxidants.* New Jersey: World Scientific; 2004. h. 83-101.
- Wilson R, Ling H, MacLean MA, Mooney, Kinane D, McKillop JH,dkk. Thyroid antibody titre and avidity in patients with recurrent miscarriage. *Fertil Steril.* 1999;71:558-61.