

DAFTAR PUSTAKA

- 1 Badan Penelitian Dan Pengembangan Kesehatan Kemetrician Kesehatan RI. Badan Penelitian dan Pengembangan Kesehatan Departemen Kesehatan RI. *Ris Kesehat Dasar* 2013. doi:1 Desember 2013.
- 2 W H O. WHO Cardiovascular diseases (CVDs). World Factsheet. 2013; : 1–6.
- 3 Benjamin EJ, Blaha MJ, Chiuve SE, Cushman M, Das SR, Deo R *et al.* *Heart Disease and Stroke Statistics'2017 Update: A Report from the American Heart Association*. 2017 doi:10.1161/CIR.0000000000000485.
- 4 Dinkes Jawa Barat. Profil Kesehatan Jawa Barat 2016. *J Mol Biol* 2016; **301**: 1163–1178.
- 5 Kumar A, Sharma M. *Basics of Human Andrology*. Springer: Singapore, 2017 doi:https://doi.org/10.1007/978-981-10-3695-8.
- 6 Kelly DM, Jones TH. Testosteron : a metabolic hormone in health and disease. *J Endocrinol* 2013; **217**: R25–R45.
- 7 Helaly MA, Daoud E, El-Mashad N. Does the serum testosteron level have a relation to coronary artery disease in elderly men? *Curr Gerontol Geriatr Res* 2011; **2011**. doi:10.1155/2011/791765.
- 8 Lemos J de, Omland T. *Chronic Coronary Artery Disease*. 1st ed. Elsevier, 2017 doi:10.1001/jama.294.3.376-a.
- 9 Ghani L, Susilawati MD, Novriani H. Faktor Risiko Dominan Penyakit Jantung Koroner di Indonesia. *Bul Penelit Kesehat* 2016; **44**: 153–164.
- 10 Lerner DJ, Kannel WB. Patterns of coronary heart disease morbidity and mortality in the sexes: A 26-year follow-up of the Framingham population. *Am Heart J* 1986. doi:10.1016/0002-8703(86)90155-9.
- 11 Mercurio G, Deidda M, Piras A, Dessalvi CC, Maffei S, Rosano GM. Gender determinants of cardiovascular risk factors and diseases. *J. Cardiovasc. Med.* 2010; **11**: 207–220.
- 12 Fahed AC, Gholmieh JM, Azar ST. Connecting the lines between hypogonadism and atherosclerosis. *Int J Endocrinol* 2012; **2012**. doi:10.1155/2012/793953.

- 13 Nakashima Y, Wight TN, Sueishi K. Early atherosclerosis in humans: Role of diffuse intimal thickening and extracellular matrix proteoglycans. *Cardiovasc. Res.* 2008. doi:10.1093/cvr/cvn099.
- 14 Williams KJ, Tabas I. The Response-to-Retention Hypothesis of Early Atherogenesis. *Arterioscler Thromb Vasc Biol* 1995. doi:10.1161/01.ATV.15.5.551.
- 15 Hevonoja T, Pentikäinen MO, Hyvönen MT, Kovanen PT, Ala-Korpela M. Structure of low density lipoprotein (LDL) particles: Basis for understanding molecular changes in modified LDL. *Biochim. Biophys. Acta - Mol. Cell Biol. Lipids.* 2000. doi:10.1016/S1388-1981(00)00123-2.
- 16 Moore KJ, Tabas I. Macrophages in the pathogenesis of atherosclerosis. *Cell* 2011. doi:10.1016/j.cell.2011.04.005.
- 17 Farb A, Burke AP, Tang AL, Liang Y, Mannan P, Smialek J *et al.* Coronary plaque erosion without rupture into a lipid core: A frequent cause of coronary thrombosis in sudden coronary death. *Circulation* 1996. doi:10.1161/01.CIR.93.7.1354.
- 18 Moreno PR, Falk E, Palacios IF, Newell JB, Fuster V, Fallon JT. Macrophage infiltration in acute coronary syndromes: Implications for plaque rupture. *Circulation* 1994. doi:10.1161/01.CIR.90.2.775.
- 19 Kloner RA, Carson C, Dobs A, Kopecky S, Mohler ER. Testosterone and Cardiovascular Disease. *J Am Coll Cardiol* 2016; **67**: 545–557.
- 20 Wayne Hou J, Collins DC, Schleicher RL. Sources of cholesterol for testosterone biosynthesis in murine leydig cells. *Endocrinology* 1990. doi:10.1210/endo-127-5-2047.
- 21 Zouboulis CC, Degitz K. Androgen action on human skin -- from basic research to clinical significance. *Exp Dermatol* 2004. doi:10.1111/j.1600-0625.2004.00255.x.
- 22 Xing Y, Edwards MA, Ahlem C, Kennedy M, Cohen A, Gomez-Sanchez CE *et al.* The effects of ACTH on steroid metabolomic profiles in human adrenal cells. *J Endocrinol* 2011. doi:10.1530/JOE-10-0493.
- 23 Young JM, McNeilly AS. Theca: The forgotten cell of the ovarian follicle. *Reproduction.* 2010. doi:10.1530/REP-10-0094.
- 24 Jin JM, Yang WX. Molecular regulation of hypothalamus-pituitary-gonads

- axis in males. *Gene*. 2014. doi:10.1016/j.gene.2014.08.048.
- 25 Keenan DM, Veldhuis JD. Divergent gonadotropin-gonadal dose-responsive coupling in healthy young and aging men. *Am J Physiol - Regul Integr Comp Physiol* 2004. doi:10.1152/ajpregu.00376.2003.
- 26 Veldhuis JD, Keenan DM, Liu PY, Iranmanesh A, Takahashi PY, Nehra AX. The aging male hypothalamic-pituitary-gonadal axis: Pulsatility and feedback. *Mol Cell Endocrinol* 2009. doi:10.1016/j.mce.2008.09.005.
- 27 Pasquali R. The hypothalamic-pituitary-adrenal axis and sex hormones in chronic stress and obesity: Pathophysiological and clinical aspects. *Ann N Y Acad Sci* 2012. doi:10.1111/j.1749-6632.2012.06569.x.
- 28 Nettleship JE, Jones RD, Channer KS, Jones TH. Testosterone and coronary artery disease. *Cardiol Rev*. 2009; **18**: 91–107.
- 29 Jones RD, Nettleship JE, Kapoor D, Jones HT, Channer KS. Testosterone and atherosclerosis in aging men: purported association and clinical implications. *Am J Cardiovasc Drugs* 2005; **5**: 141–154.
- 30 Kelly DM, Jones TH. Testosterone: A vascular hormone in health and disease. *J Endocrinol* 2013. doi:10.1530/JOE-12-0582.
- 31 Petersen JW, Pepine CJ. Microvascular coronary dysfunction and ischemic heart disease: Where are we in 2014? *Trends Cardiovasc. Med*. 2015; **25**: 98–103.
- 32 Herrick R, Herrick R. *The Heart*. 2013 doi:10.1093/oseo/instance.00036624.
- 33 Wynn GJ, Noronha B, Burgess MI. Functional significance of the conus artery as a collateral to an occluded left anterior descending artery demonstrated by stress echocardiography. *Int J Cardiol* 2010; **140**. doi:10.1016/j.ijcard.2008.11.039.
- 34 Schlesinger MJ, Zoll PM, Wessler S. The conus artery: A third coronary artery. *Am Heart J* 1949; **38**: 823–836.
- 35 Barret K, Brooks H, Boitano S, Barman S. *Blood as a Circulatory Fluid & the Dynamics of Blood & Lymph Flow*. 2010.
- 36 Rubens R, Dhont M, Vermeulen A. Further studies on leydig cell function in old age. *J Clin Endocrinol Metab* 1974; **39**: 40–45.
- 37 BAKER HWG, BURGER HG, de KRETZER DM, HUDSON B, O'CONNOR S, WANG C *et al*. CHANGES IN THE PITUITARY-

- TESTICULAR SYSTEM WITH AGE. *Clin Endocrinol (Oxf)* 1976; **5**: 349–372.
- 38 Vermeulen A, Rubens R, Verdonck L. Testosterone secretion and metabolism in male senescence. *J Clin Endocrinol Metab* 1972; **34**: 730–735.
- 39 Pirke KM, Doerr P. Age related changes in free plasma testosterone, dihydrotestosterone, and oestradiol. *Acta Endocrinol (Copenh)* 1975; **70**: 57.
- 40 Purifoy FE, Koopmans LH, Mayes DM. Age differences in serum androgen levels in normal adult males. *Hum Biol* 1981; **53**: 499–511.
- 41 Bremner WJ, Vitiello M V., Prinz PN. Loss of circadian rhythmicity in blood testosterone levels with aging in normal men. *J Clin Endocrinol Metab* 1983; **56**: 1278–1281.
- 42 Tenover JS, Matsumoto AM, Plymate SR, Bremner WJ. The effects of aging in normal men on bioavailable testosterone and luteinizing hormone secretion: Response to clomiphene citrate. *J Clin Endocrinol Metab* 1987; **65**: 1118–1126.
- 43 Gray A, Berlin JA, McKinlay JB, Longcope C. An examination of research design effects on the association of testosterone and male aging: Results of a meta-analysis. *J Clin Epidemiol* 1991; **44**: 671–684.
- 44 Ferrini RL, Barrett-Connor E. Sex hormones and age: A cross-sectional study of testosterone and estradiol and their bioavailable fractions in community-dwelling men. *Am J Epidemiol* 1998; **147**: 750–754.
- 45 Harman SM. Longitudinal Effects of Aging on Serum Total and Free Testosterone Levels in Healthy Men. *J Clin Endocrinol Metab* 2001; **86**: 724–731.
- 46 Oskui PM, French WJ, Herring MJ, Mayeda GS, Burstein S, Kloner RA. Testosterone and the Cardiovascular System: A Comprehensive Review of the Clinical Literature. *J Am Heart Assoc* 2013; **2**: 1–22.
- 47 Haring R, Völzke H, Steveling A, Krebs A, Felix SB, Schöfl C *et al*. Low serum testosterone levels are associated with increased risk of mortality in a population-based cohort of men aged 20-79. *Eur Heart J* 2010; **31**: 1494–1501.
- 48 Khaw K-T, Dowsett M, Folkard E, Bingham S, Wareham N, Luben R *et al*. Endogenous testosterone and mortality due to all causes, cardiovascular

- disease, and cancer in men: European prospective investigation into cancer in Norfolk (EPIC-Norfolk) Prospective Population Study. *Circulation* 2007; **116**: 2694–701.
- 49 Smith NL, Kizer JR, Cappola AR. Stroke in Men in the Cardiovascular Health Study. 2015; **81**: 746–753.
- 50 Araujo AB, O'Donnell AB, Brambilla DJ, Simpson WB, Longcope C, Matsumoto AM *et al.* Prevalence and incidence of androgen deficiency in middle-aged and older men: Estimates from the Massachusetts male aging study. *J Clin Endocrinol Metab* 2004; **89**: 5920–5926.
- 51 Traish AM, Miner MM, Morgentaler A, Zitzmann M. Testosterone deficiency. *Am J Med* 2011; **124**: 578–87.
- 52 Mooradian AD, Morley JE, Korenman SG. Biological actions of androgens. *Endocr Rev* 1987; **8**: 1–28.
- 53 Walsh JP, Kitchens AC. Testosterone therapy and cardiovascular risk. *Trends Cardiovasc Med* 2015; **25**: 250–257.
- 54 Carnegie C. Diagnosis of hypogonadism: clinical assessments and laboratory tests. *Rev Urol* 2004; **6 Suppl 6**: S3-8.
- 55 Brunton P. Effects of maternal exposure to social stress during pregnancy: Consequences for mother and offspring. *Reproduction* 2013; **146**. doi:10.1530/REP-13-0258.
- 56 Bremner WJ, Vitiello M V, Prinz PN. Loss of circadian rhythmicity in blood testosterone levels with aging in normal men. *J Clin Endocrinol Metab* 1983; **56**: 1278–81.
- 57 Tenover JS, Matsumoto AM, Plymate SR, Bremner WJ. The effects of aging in normal men on bioavailable testosterone and luteinizing hormone secretion: response to clomiphene citrate. *J Clin Endocrinol Metab* 1987; **65**: 1118–26.
- 58 Gray A, Berlin JA, McKinlay JB, Longcope C. An examination of research design effects on the association of testosterone and male aging: results of a meta-analysis. *J Clin Epidemiol* 1991; **44**: 671–84.
- 59 Ferrini RL, Barrett-Connor E. Sex hormones and age: a cross-sectional study of testosterone and estradiol and their bioavailable fractions in community-dwelling men. *Am J Epidemiol* 1998; **147**: 750–4.

- 60 Morris PD, Channer KS. Testosterone and cardiovascular disease in men. *Asian J. Androl.* 2012; **14**: 428–435.
- 61 Zitzmann M. Testosterone deficiency and treatment in older men: Definition, treatment, pitfalls. *Asian J. Androl.* 2010; **12**: 623–625.
- 62 Kloner RA, Carson C, Dobs A, Kopecky S, Mohler ER. Testosterone and Cardiovascular Disease. *J. Am. Coll. Cardiol.* 2016; **67**: 545–557.
- 63 Bhasin S, Cunningham GR, Hayes FJ, Matsumoto AM, Snyder PJ, Swerdloff RS *et al.* Testosterone therapy in men with androgen deficiency syndromes: An endocrine society clinical practice guideline. *J. Clin. Endocrinol. Metab.* 2010; **95**: 2536–2559.
- 64 Khera M, Bhattacharya RK, Blick G, Kushner H, Nguyen D, Miner MM. Improved sexual function with testosterone replacement therapy in hypogonadal men: Real-world data from the Testim Registry in the United States (TRiUS). *J Sex Med* 2011; **8**: 3204–3213.
- 65 Cunningham GR, Stephens-Shields AJ, Rosen RC, Wang C, Ellenberg SS, Matsumoto AM *et al.* Association of sex hormones with sexual function, vitality, and physical function of symptomatic older men with low testosterone levels at baseline in the testosterone trials. *J Clin Endocrinol Metab* 2015; **100**: 1146–1155.
- 66 Iglesias P, Prado F, Macías MC, Guerrero MT, Muñoz A, Ridruejo E *et al.* Hypogonadism in aged hospitalized male patients: Prevalence and clinical outcome. *J Endocrinol Invest* 2014; **37**: 135–141.
- 67 Langouche L, Van den Berghe G. Hypothalamic-pituitary hormones during critical illness: A dynamic neuroendocrine response. In: *Handbook of Clinical Neurology*. Elsevier B.V., 2014, pp 115–126.
- 68 Dhindsa S, Reddy A, Karam JS, Bilkis S, Chaurasia A, Mehta A *et al.* Prevalence of subnormal testosterone concentrations in men with type 2 diabetes and chronic kidney disease. *Eur J Endocrinol* 2015; **173**: 359–366.
- 69 Sumii K, Miyake H, Enatsu N, Matsushita K, Fujisawa M. Prospective assessment of health-related quality of life in men with late-onset hypogonadism who received testosterone replacement therapy. *Andrologia* 2016; **48**: 198–202.
- 70 Harman SM, Metter EJ, Tobin JD, Pearson J, Blackman MR. Longitudinal

- effects of aging on serum total and free testosterone levels in healthy men. *J Clin Endocrinol Metab* 2001; **86**: 724–731.
- 71 Mendis S, Thygesen K, Kuulasmaa K, Giampaoli S, Mahonen M, Blackett KN *et al.* World Health Organization definition of myocardial infarction: 2008-09 revision. *Int J Epidemiol* 2011; **40**: 139–146.
- 72 Kiani F, Hesabi N, Arbabisarjou A. Assessment of Risk Factors in Patients With Myocardial Infarction. *Glob J Health Sci* 2015; **8**: 255.
- 73 Corona G, Rastrelli G, Vignozzi L, Mannucci E, Maggi M. Testosterone, cardiovascular disease and the metabolic syndrome. *Best Pract. Res. Clin. Endocrinol. Metab.* 2011; **25**: 337–353.
- 74 Stuckey HL, Nobel J. The connection between art, healing, and public health: A review of current literature. *Am J Public Health* 2010; **100**: 254–263.
- 75 Thygesen K, Alpert JS, Jaffe AS, Simoons ML, Chaitman BR, White HD. ESC / ACCF / AHA / WHF Expert Consensus Document Third Universal Definition of Myocardial Infarction. 2012. doi:10.1161/CIR.0b013e31826e1058.
- 76 Vallin J, WHO-ROE. Atlas of Health in Europe. *Popul (French Ed* 2005; **60**: 379.
- 77 Corona G, Mannucci E, Forti G, Maggi M. Hypogonadism, ED, metabolic syndrome and obesity: A pathological link supporting cardiovascular diseases. *Int J Androl* 2009; **32**: 587–598.
- 78 Muraleedharan V, Jones TH. Review: Testosterone and the metabolic syndrome. *Ther. Adv. Endocrinol. Metab.* 2010; **1**: 207–223.
- 79 Corona G, Mannucci E, Fisher AD, Lotti F, Petrone L, Balercia G *et al.* Low levels of androgens in men with erectile dysfunction and obesity. *J Sex Med* 2008; **5**: 2454–2463.
- 80 Bäck M, Gasser TC, Michel J-B, Caligiuri G. Biomechanical factors in the biology of aortic wall and aortic valve diseases. *Cardiovasc Res* 2013; **99**: 232–41.
- 81 Bäck M, Weber C, Lutgens E. Regulation of atherosclerotic plaque inflammation. *J. Intern. Med.* 2015; **278**: 462–482.
- 82 Mailer RKW, Gisterå A, Polyzos KA, Ketelhuth DFJ, Hansson GK. Hypercholesterolemia Induces Differentiation of Regulatory T Cells in the

- Liver. *Circ Res* 2017; **120**: 1740–1753.
- 83 Geng YJ, Jonasson L. Linking immunity to atherosclerosis: Implications for vascular pharmacology - A tribute to Göran K. Hansson. *Vascul. Pharmacol.* 2012; **56**: 29–33.
- 84 Hewison M. *Vitamin D and Innate and Adaptive Immunity*. 1st ed. Elsevier Inc., 2011 doi:10.1016/B978-0-12-386960-9.00002-2.
- 85 Hasil Cari trp Yahoo untuk Serhan CN: Pro-resolving lipid mediators are leads for resolution physiology, *Nature* 510:92–101, 2014. https://id.search.yahoo.com/yhs/search?hspart=trp&hsimp=yhs-001&type=Y61_F11_162407_110818&p=Serhan+CN%3A+Pro-resolving+lipid+mediators+are+leads+for+resolution+physiology%2C+Nature+510%3A92-101%2C+2014. (accessed 17 Oct2019).
- 86 Michel JB, Thaunat O, Houard X, Meilhac O, Caligiuri G, Nicoletti A. Topological determinants and consequences of adventitial responses to arterial wall injury. *Arterioscler. Thromb. Vasc. Biol.* 2007; **27**: 1259–1268.
- 87 Maggio M, Basaria S, Ceda GP, Ble A, Ling SM, Bandinelli S *et al.* The relationship between testosterone and molecular markers of inflammation in older men. *J Endocrinol Invest* 2005; **28**: 116–9.
- 88 Malkin CJ, Pugh PJ, Jones RD, Kapoor D, Channer KS, Jones TH. The effect of testosterone replacement on endogenous inflammatory cytokines and lipid profiles in hypogonadal men. *J Clin Endocrinol Metab* 2004; **89**: 3313–8.
- 89 Burney BO, Hayes TG, Smiechowska J, Cardwell G, Papusha V, Bhargava P *et al.* Low testosterone levels and increased inflammatory markers in patients with cancer and relationship with cachexia. *J Clin Endocrinol Metab* 2012; **97**: E700-9.
- 90 Fui MNT, Dupuis P, Grossmann M. Lowered testosterone in male obesity: Mechanisms, morbidity and management. *Asian J. Androl.* 2014; **16**: 223–231.
- 91 Calder PC, Ahluwalia N, Brouns F, Buetler T, Clement K, Cunningham K *et al.* Dietary factors and low-grade inflammation in relation to overweight and obesity. *Br J Nutr* 2011; **106 Suppl 3**: S5-78.
- 92 Norata GD, Tibolla G, Seccomandi PM, Poletti A, Catapano AL. Dihydrotestosterone decreases tumor necrosis factor-alpha and

- lipopolysaccharide-induced inflammatory response in human endothelial cells. *J Clin Endocrinol Metab* 2006; **91**: 546–54.
- 93 Bini EI, D’Attilio L, Marquina-Castillo B, Mata-Espinosa D, Díaz A, Marquez-Velasco R *et al*. The implication of pro-inflammatory cytokines in the impaired production of gonadal androgens by patients with pulmonary tuberculosis. *Tuberculosis (Edinb)* 2015; **95**: 701–706.
- 94 Jones TH, Saad F. The effects of testosterone on risk factors for, and the mediators of, the atherosclerotic process. *Atherosclerosis* 2009; **207**: 318–27.
- 95 Cornoldi A, Caminiti G, Marazzi G, Vitale C, Patrizi R, Volterrani M *et al*. Effects of chronic testosterone administration on myocardial ischemia, lipid metabolism and insulin resistance in elderly male diabetic patients with coronary artery disease. *Int J Cardiol* 2010; **142**: 50–5.
- 96 Muller M, van den Beld AW, Bots ML, Grobbee DE, Lamberts SWJ, van der Schouw YT. Endogenous sex hormones and progression of carotid atherosclerosis in elderly men. *Circulation* 2004; **109**: 2074–9.
- 97 Paul SD, O’Gara PT, Mahjoub ZA, DiSalvo TG, O’Donnell CJ, Newell JB *et al*. Geriatric patients with acute myocardial infarction: Cardiac risk factors profiles, presentation, thrombolysis, coronary interventions, and prognosis. *Am Heart J* 1996. doi:10.1016/S0002-8703(96)90275-6.
- 98 Insert Kit Cobas Roche e411. .
- 99 Mohamad NV, Wong SK, Wan Hasan WN, Jolly JJ, Nur-Farhana MF, Ima-Nirwana S *et al*. The relationship between circulating testosterone and inflammatory cytokines in men. *Aging Male*. 2019; **22**: 129–140.
- 100 Grosman H, Fabre B, Mesch V, Lopez MA, Schreier L, Mazza O *et al*. Lipoproteins, sex hormones and inflammatory markers in association with prostate cancer. *Aging Male* 2010; **13**: 87–92.
- 101 John Edward Hall ACG. *Guyton and Hall Textbook of Medical Physiology*. Elsevier, 2011.
- 102 Lenfant C, Chobanian AA V, Jones DWD, Roccella EEJ, Bakris GL, Black HR, et al. Conflicts of Interest - Financial Disclosure: The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC 7). Seventh Rep Jt Natl Comm Prev

Detect Eval Treat High Blood Press (JNC 7) [Internet].2003;289(19):1206–52.Availablefrom:

<http://www.nhlbi.nih.gov/guidelines/hypertension/writers.htm>
<http://jama.jamanetwoja.com.ezp->

prod1.lul.harvard.edu/article.aspx?articleid=196589&resultClick=3
[tp://www.nhlbi.nih.gov/guidelines/hypertension/disclose.htm](http://www.nhlbi.nih.gov/guidelines/hypertension/disclose.htm)

- 103 Standring, Susan., et al, 2005. Gray's Anatomy : The Anatomical Basis of Clinical Practice 39th Edition. Spain : Elsevier.
- 104 Moore KL, Dalley AF, Agur AMR. Clinically Oriented Anatomy (Seventh Edition). Lippincott Williams & Wilkins, a Wolters Kluwer business. 2014.
- 105 Sherwood L. Introduction to Human Physiology 8th edition. United StateBrooks/Cole,Cengage Learn. 2013;
- 106 Jacob SW. Sobotta Atlas of Human Anatomy. JAMA J Am Med Assoc. 1999;
- 107 Eroschenko VP. Atlas Histologi, diFiore. EGC. 2011.
- 108 Tortora GJ, Derrickson B. <Gerard J. Tortora, Bryan H. Derrickson Principles of Anatomy and Physiology, Thirteenth Edition

