

## DAFTAR PUSTAKA

1. Vasegh Z, Safi Y, azar MS, Ahsaie MG, Arianezhad SM. Assessment of bony changes in temporomandibular joint in patients using cone beam computed tomography – a cross sectional study. *Head Face Med* [Internet]. 2023;19(1):1–11. Available from: <https://doi.org/10.1186/s13005-023-00392-z>
2. Fatola D, Adiputra S, Chairunnisa R. Risk factors of temporomandibular disorders: literature review. *Makassar Dent J*. 2021;10(3):288–93.
3. Dhabale GS, Bhowate RR. Cone-Beam Computed Tomography for Temporomandibular Joint Imaging. *Cureus*. 2022;14(11):1–8.
4. Wilkie G, Al-Ani Z. Temporomandibular joint anatomy, function and clinical relevance. *Br Dent J*. 2022;233(7):539–46.
5. Gupta S, Baghel NS, Narula J. Milestones of temporomandibular joint. 2021;7(2):493–5.
6. Seo YS, Park HJ, Yu SK, Jeong SR, Ryu JW. Evaluation of Cortical Bone Formation on Mandibular Condyle in Asymptomatic Adolescents and Young Adults Using Cone-Beam Computed Tomography. *Life*. 2022;12(12).
7. Roberts WE, Goodacre CJ. The Temporomandibular Joint: A Critical Review of Life-Support Functions, Development, Articular Surfaces, Biomechanics and Degeneration. *J Prosthodont* [Internet]. 2020 Dec 6;29(9):772–9. Available from: <https://onlinelibrary.wiley.com/doi/10.1111/jopr.13203>
8. Barak MM. Cortical and Trabecular Bone Modeling and Implications for Bone Functional Adaptation in the Mammalian Tibia. *Bioengineering* [Internet]. 2024 May 20;11(5):514. Available from: <https://www.mdpi.com/2306-5354/11/5/514>
9. Shahidi S, Salehi P, Abedi P, Dehbozorgi M, Hamedani S, Berahman N. Comparison of the Bony Changes of TMJ in Patients With and Without TMD Complaints Using CBCT. *J Dent (Shiraz, Iran)* [Internet]. 2018 Jun;19(2):142–9. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/29854888>
10. Bianchi J, Gonçalves JR, de Oliveira Ruellas AC, Bianchi JVP, Ashman LM, Yatabe M, et al. Radiographic interpretation using high-resolution Cbct to diagnose degenerative temporomandibular joint disease. *PLoS One*. 2021;16(8 August):1–12.
11. Zheng H, Shi L, Lu H, Liu Z, Yu M, Wang Y, et al. Influence of edentulism on the structure and function of temporomandibular joint. *Heliyon* [Internet]. 2023;9(10):e20307. Available from: <https://doi.org/10.1016/j.heliyon.2023.e20307>
12. Hanin I, Putri PW. Relationship of Temporomandibular Joint Disorders and Psychological Distress in Young Adults. *J Syiah Kuala Dent Soc*. 2023;8(1):55–60.
13. Kim TH, Kim YJ, Song YH, Tae I, Lim HK, Jung SK. Assessment of Morphologic Change of Mandibular Condyle in Temporomandibular Joint Osteoarthritis Patients with Stabilization Splint Therapy: A Pilot Study. *Healthc*. 2022;10(10).
14. Hasanah M, Arifin R, Taufiqurrahman I, Sari GD, Sitepu A. Hubungan Temporomandibular Disorders Terhadap Oral Health Related Quality of Life. *Dentin*. 2023;7(3):157–63.
15. Alrizqi AH, Aleissa BM. Prevalence of Temporomandibular Disorders

- Between 2015-2021: A Literature Review. *Cureus*. 2023;15(4).
16. Zieliński G, Pająk-Zielińska B, Ginszt M. A Meta-Analysis of the Global Prevalence of Temporomandibular Disorders. *J Clin Med*. 2024;13(5).
  17. Marpaung C, van Selms MKA, Lobbezoo F. Prevalence and risk indicators of pain-related temporomandibular disorders among Indonesian children and adolescents. *Community Dent Oral Epidemiol* [Internet]. 2018 Aug 21;46(4):400–6. Available from: <https://onlinelibrary.wiley.com/doi/10.1111/cdoe.12382>
  18. Li C, Zhang Q. Comparison of imaging findings of 714 symptomatic and asymptomatic temporomandibular joints: a retrospective study. *BMC Oral Health* [Internet]. 2023;23(1):1–11. Available from: <https://doi.org/10.1186/s12903-023-02783-9>
  19. Ma RH, Feng JL, Bornstein MM, Li G. Relationship between development of the condylar cortex and the changes in condyle morphology: a cone-beam computed tomography (CBCT) observational study. *Quant Imaging Med Surg*. 2023;13(4):2388–96.
  20. Sethna Muthlakshmi KS, Krithika CL, Asokan K. Evaluation and Correlation of Condylar Cortication by Cone-Beam Computed Tomography. *Contemp Clin Dent* [Internet]. 2022 Jan;13(1):30–4. Available from: [https://journals.lww.com/10.4103/ccd.ccd\\_341\\_20](https://journals.lww.com/10.4103/ccd.ccd_341_20)
  21. Almpani K, Tran H, Ferri A, Hung M. Assessment of condylar anatomy and degenerative changes in temporomandibular joint disorders – A scoping review. *J Oral Biol Craniofacial Res* [Internet]. 2023 Nov;13(6):764–80. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S2212426823001203>
  22. Görürgöz C, İçen M, Kurt M, Aksoy S, Bakırarar B, Rozylo-Kalinowska I, et al. Degenerative changes of the mandibular condyle in relation to the temporomandibular joint space, gender and age: A multicenter CBCT study. *Dent Med Probl* [Internet]. 2023 Mar 31;60(1):127–35. Available from: <https://dmp.umw.edu.pl/en/article/2023/60/1/127/>
  23. Ulay G, Pekiner FN, Orhan K. Evaluation of the relationship between the degenerative changes and bone quality of mandibular condyle and articular eminence in temporomandibular disorders by cone beam computed tomography. *CRANIO®* [Internet]. 2023 May 4;41(3):218–29. Available from: <https://www.tandfonline.com/doi/full/10.1080/08869634.2020.1853307>
  24. G AK. Bone changes in condyles of asymptomatic temperomandibular joints & its correlation with age, gender and occlusal condition; a digital panoramic study. *J Dent Heal Oral Disord Ther*. 2021;12(4):111–5.
  25. Almashraqi AA, Sayed BA, Mokli LK, Jaafari SA, Halboub E, Parveen S, et al. Recommendations for standard criteria for the positional and morphological evaluation of temporomandibular joint osseous structures using cone-beam CT: a systematic review. *Eur Radiol* [Internet]. 2023;3126–40. Available from: <https://doi.org/10.1007/s00330-023-10248-4>
  26. Berry K, Padilla M, Mitirattanakul S, Enciso R. Temporomandibular joint findings in CBCT images: A retrospective study. *CRANIO®* [Internet]. 2021 Dec 11;1–6. Available from: <https://doi.org/10.1080/08869634.2021.2015102>
  27. Ahmad OB, Boschi-Pinto C, Lopez AD, Murray CJ, Lozano R, Inoue M. Age standardization of rates: a new WHO standard. *GPE Discussion Paper Series: No31*. Geneva World Heal Organ [Internet]. 2001;(31):1–14. Available from: <http://www.who.int/healthinfo/paper31.pdf>

28. Paknahad M, Barzegar Z, Mohaghegh M. Evaluation of the relationship between condylar bony changes and condylar bone density in the temporomandibular joint structures: A <sc>CBCT</sc> study. *Oral Surg* [Internet]. 2023 Nov 10;16(4):336–41. Available from: <https://onlinelibrary.wiley.com/doi/10.1111/ors.12813>
29. Abbass MMS, Rady D, Moshay S EI, Radwan IA, Wadan A hassan S, Dörfer CE, et al. The Temporomandibular Joint and the Human Body: A New Perspective on Cross Talk. 2024;1–35.
30. Vîrlan M, Păun D, Bordea E, Pellegrini A, Spînu A, Ivaşcu R, et al. Factors influencing the articular eminence of the temporomandibular joint (Review). *Exp Ther Med*. 2021;22(4):1–5.
31. Zhu J. Precocious Puberty. In: *Endocrine Conditions in Pediatrics* [Internet]. Cham: Springer International Publishing; 2021. p. 253–8. Available from: [http://link.springer.com/10.1007/978-3-030-52215-5\\_43](http://link.springer.com/10.1007/978-3-030-52215-5_43)
32. Bayrak S, Halıcıoğlu S, Kose G, Halıcıoğlu K. Evaluation of the relationship between mandibular condyle cortication and chronologic age with cone beam computed tomography. *J Forensic Leg Med* [Internet]. 2018 Apr;55:39–44. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S1752928X18300301>
33. Satoh M, Hasegawa Y. Factors affecting prepubertal and pubertal bone age progression. *Front Endocrinol (Lausanne)*. 2022;13(August):1–7.
34. Kim YH, Shin JY, Lee A, Park S, Han SS, Hwang HJ. Automated cortical thickness measurement of the mandibular condyle head on CBCT images using a deep learning method. *Sci Rep* [Internet]. 2021 Jul 21;11(1):14852. Available from: <https://www.nature.com/articles/s41598-021-94362-7>
35. Mühlberger G, Svejda M, Lottersberger C, Emschoff R, Putz R, Kuhn V. Mineralization density and apparent density in mandibular condyle bone. *Oral Surgery, Oral Med Oral Pathol Oral Radiol Endodontology* [Internet]. 2009 Apr;107(4):573–9. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S1079210408008457>
36. Ma Q, Miri Z, Haugen HJ, Moghanian A, Loca D. Significance of mechanical loading in bone fracture healing, bone regeneration, and vascularization. *J Tissue Eng* [Internet]. 2023 Jan 22;14. Available from: <https://journals.sagepub.com/doi/10.1177/20417314231172573>
37. Feng R, Hu W, Li Y, Yao X, Li J, Li X, et al. Mechanotransduction in subchondral bone microenvironment and targeted interventions for osteoarthritis. *Mechanobiol Med* [Internet]. 2024 Jun;2(2):100043. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S2949907024000068>
38. Zheng XQ, Huang J, Lin J liang, Song CL. Pathophysiological mechanism of acute bone loss after fracture. *J Adv Res* [Internet]. 2023 Jul;49:63–80. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S2090123222002004>
39. Ghasemzadeh F, Mortazavi N, Mallahi M, Gharib MH, Behnampour N, Badeleh MT, et al. Association between psychological stress and mandibular condyle structure: an analytical cross-sectional study. *BMC Musculoskeletal Disord* [Internet]. 2024 Jul 19;25(1):563. Available from: <https://bmcmusculoskeletaldisord.biomedcentral.com/articles/10.1186/s12891-024-07692-8>
40. Vlăduţu D, Popescu SM, Merçuţ R, Ionescu M, Scriciu M, Glodeanu AD, et al. Associations between Bruxism, Stress, and Manifestations of

- Temporomandibular Disorder in Young Students. *Int J Environ Res Public Health* [Internet]. 2022 Apr 29;19(9):5415. Available from: <https://www.mdpi.com/1660-4601/19/9/5415>
41. Ali ZA, Al-Ghurabi ZH. Degenerative Bone Change in Iraqi Patient Using Cone-Beam Computed Tomography: Influence by Gender. *J Oral Dent Res* [Internet]. 2023 Apr 19;10(2). Available from: <https://www.iaor.net/28-degenerative-bone-change-in-iraqi-patient-using-cone-beam-computed-tomography-influence-by-gender>
  42. Dsouza V, Rao P, Kini R. Assessment of degenerative changes in the temporomandibular joint: A retrospective cone-beam computed tomography study. *SRM J Res Dent Sci* [Internet]. 2020;11(4):195. Available from: [https://journals.lww.com/10.4103/srmjrs.srmjrs\\_69\\_20](https://journals.lww.com/10.4103/srmjrs.srmjrs_69_20)
  43. Ortona E, Pagano MT, Capossela L, Malorni W. The Role of Sex Differences in Bone Health and Healing. *Biology (Basel)* [Internet]. 2023 Jul 12;12(7):993. Available from: <https://www.mdpi.com/2079-7737/12/7/993>
  44. Robinson JL, Johnson PM, Kister K, Yin MT, Chen J, Wadhwa S. Estrogen signaling impacts temporomandibular joint and periodontal disease pathology. *Odontology* [Internet]. 2020 Apr 3;108(2):153–65. Available from: <http://link.springer.com/10.1007/s10266-019-00439-1>
  45. Šromová V, Sobola D, Kaspar P. A Brief Review of Bone Cell Function and Importance. *Cells* [Internet]. 2023 Nov 5;12(21):2576. Available from: <https://www.mdpi.com/2073-4409/12/21/2576>
  46. Jo JH, Chung JW. Gender Differences in Clinical Characteristics of Korean Temporomandibular Disorder Patients. *Appl Sci* [Internet]. 2021 Apr 16;11(8):3583. Available from: <https://www.mdpi.com/2076-3417/11/8/3583>
  47. Jaber M, Khalid A, Gamal A, Faisal R, Mathew A, Ingafou M. A Comparative Study of Condylar Bone Pathology in Patients with and without Temporomandibular Joint Disorders Using Orthopantomography. *J Clin Med* [Internet]. 2023 Sep 6;12(18):5802. Available from: <https://www.mdpi.com/2077-0383/12/18/5802>

**LAMPIRAN I**

**SURAT PERNYATAAN PERSETUJUAN (PSP)  
UNTUK IKUT SERTA DALAM PENELITIAN  
(INFORMED CONSENT)**

**\*Kategori Orang Dewasa**

Saya telah membaca dan/atau memperoleh penjelasan informasi penelitian. Saya sepenuhnya memahami tentang tujuan, manfaat, dan risiko yang mungkin timbul dalam penelitian, serta telah diberi kesempatan untuk bertanya dan memperoleh jawaban, sewaktu-waktu dapat mengundurkan diri dari keikutsertaan, maka saya setuju/tidak setuju\*) menjadi responden penelitian ini dengan berjudul:

**“Evaluasi Maturasi dan Kondisi Patologis Kondilus Mandibula pada Pasien Asimtomatik TMJ: Studi CBCT”**

Saya menyatakan kesukarelaan menjadi responden dalam penelitian ini tanpa tekanan/paksaan siapa pun.

Saya setuju:

**Ya/Tidak\*)**

\*coret yang tidak perlu

	<b>Tanggal</b>	<b>Tanda Tangan</b>
Nama responden:		
Usia:		
Alamat:		
Nama peneliti dan/atau pemberi informasi:		

**SURAT PERNYATAAN PERSETUJUAN (PSP)  
UNTUK IKUT SERTA DALAM PENELITIAN  
(INFORMED CONSENT)**

**\*Kategori Sampel Anak**

Saya telah membaca dan/atau memperoleh penjelasan informasi penelitian. Saya sepenuhnya memahami tentang tujuan, manfaat, dan risiko yang mungkin timbul dalam penelitian, serta telah diberi kesempatan untuk bertanya dan memperoleh jawaban, sewaktu-waktu dapat mengundurkan diri dari keikutsertaan, maka saya setuju/tidak setuju\*) menjadi responden penelitian ini dengan berjudul:

**“Evaluasi Maturasi dan Kondisi Patologis Kondilus Mandibula pada Pasien Asimtomatik TMJ: Studi CBCT”**

Saya menyatakan kesukarelaan menjadi responden dalam penelitian ini tanpa tekanan/paksaan siapa pun.

Saya setuju:

**Ya/Tidak\*)**

\*coret yang tidak perlu

	<b>Tanggal</b>	<b>Tanda Tangan</b>
Nama responden: Usia: Alamat:		
Nama orang tua/wali:		
Nama peneliti dan/atau pemberi informasi:		

## LAMPIRAN II

### Kriteria Diagnostik untuk Gangguan Temporomandibular Kuesioner Gejala

Nama pasien \_\_\_\_\_ Tanggal \_\_\_\_\_

#### RASA SAKIT

1. Pernahkah Anda mengalami nyeri pada rahang, pelipis, telinga, atau di depan telinga di kedua sisi? Tidak.  Ya

**Jika Anda menjawab TIDAK, lanjutkan ke Pertanyaan 5.**

2. Berapa tahun atau bulan yang lalu rasa sakit di rahang, pelipis, di telinga, atau di depan telinga pertama kali dimulai? \_\_\_\_\_ tahun \_\_\_\_\_ bulan

3. Dalam 30 hari terakhir, manakah di antara yang berikut ini yang paling menggambarkan rasa sakit pada rahang, pelipis, telinga, atau di depan telinga di kedua sisi?  Tidak ada rasa sakit  
 Rasa sakit datang dan pergi  
Pilih SATU tanggapan.  Rasa sakit selalu ada

**Jika Anda menjawab TIDAK pada Pertanyaan 3, lanjutkan ke Pertanyaan 5.**

4. Dalam 30 hari terakhir, apakah aktivitas berikut ini mengubah rasa sakit (yaitu membuatnya lebih baik atau memperburuk) di rahang, pelipis, di telinga, atau di depan telinga di kedua sisi?

	Tidak.	Ya
A. Mengunyah makanan yang keras atau keras	<input type="checkbox"/>	<input type="checkbox"/>
B. Membuka mulut, atau menggerakkan rahang ke depan atau ke samping	<input type="checkbox"/>	<input type="checkbox"/>
C. Kebiasaan rahang seperti menyatukan gigi, mengatupkan/menggerakkan gigi, atau mengunyah permen karet	<input type="checkbox"/>	<input type="checkbox"/>
D. Aktivitas rahang lainnya seperti berbicara, mencium, atau menguap	<input type="checkbox"/>	<input type="checkbox"/>

#### SAKIT KEPALA

5. Dalam 30 hari terakhir, apakah Anda pernah mengalami sakit kepala yang mencakup area pelipis kepala? Tidak.  Ya

**Jika Anda menjawab TIDAK pada Pertanyaan 5, lanjutkan ke Pertanyaan 8.**

6. Berapa tahun atau bulan yang lalu sakit kepala pelipis Anda pertama kali muncul? \_\_\_\_\_ tahun \_\_\_\_\_ bulan

7. Dalam 30 hari terakhir, apakah aktivitas berikut ini mengubah sakit kepala (yaitu, membuatnya lebih baik atau lebih buruk) di area pelipis Anda di kedua sisi?

	Tidak.	Ya
A. Mengunyah makanan yang keras atau keras	<input type="checkbox"/>	<input type="checkbox"/>
B. Membuka mulut, atau menggerakkan rahang ke depan atau ke samping	<input type="checkbox"/>	<input type="checkbox"/>
C. Kebiasaan rahang seperti menyatukan gigi, mengepalkan/menggerakkan gigi, atau mengunyah permen karet	<input type="checkbox"/>	<input type="checkbox"/>
D. Aktivitas rahang lainnya seperti berbicara, mencium, atau menguap	<input type="checkbox"/>	<input type="checkbox"/>

SUARA SENDI RAHANG			Penggunaan kantor			
8.	Dalam 30 hari terakhir, apakah Anda pernah mengalami bunyi pada sendi rahang saat Anda menggerakkan atau menggunakan rahang Anda?	Tidak. <input type="checkbox"/>	Ya <input type="checkbox"/>	R <input type="checkbox"/>	L <input type="checkbox"/>	DNK <input type="checkbox"/>
<b>PENGUNCIAN RAHANG YANG TERTUTUP</b>						
9.	Pernahkah rahang Anda terkunci, bahkan untuk sesaat, sehingga <u>tidak mau terbuka</u> SEPENUHNYA? <b>Jika Anda menjawab TIDAK pada Pertanyaan 9, lanjutkan ke Pertanyaan 13.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	Apakah rahang Anda terkunci atau tersangkut cukup parah sehingga membatasi bukaan rahang Anda dan mengganggu kemampuan Anda untuk makan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	Dalam 30 hari terakhir, apakah rahang Anda terkunci sehingga Anda <u>tidak dapat membuka</u> SEPENUHNYA, bahkan untuk sesaat, dan kemudian membuka kuncinya sehingga Anda dapat membuka SEPENUHNYA? <b>Jika Anda menjawab TIDAK pada Pertanyaan 11, lanjutkan ke Pertanyaan 13</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	Apakah rahang Anda saat ini terkunci atau terbatas sehingga rahang Anda <u>tidak dapat membuka</u> SEPENUHNYA?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>PENGUNCIAN RAHANG YANG TERBUKA</b>						
13.	Dalam 30 hari terakhir, ketika Anda membuka mulut lebar-lebar, apakah rahang Anda terkunci atau tersangkut bahkan untuk sesaat sehingga Anda <u>tidak dapat</u> menutupnya dari posisi terbuka lebar ini? <b>Jika Anda menjawab TIDAK pada Pertanyaan 13, maka Anda sudah selesai.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	Dalam 30 hari terakhir, ketika rahang Anda terkunci atau terbuka lebar, apakah Anda harus melakukan sesuatu untuk menutupnya, termasuk mengistirahatkan, menggerakkan, mendorong, atau melakukan manuver?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## LAMPIRAN IV

## Output Uji Statistik

## Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Umur	.164	33	.024	.880	33	.002
JenisKelamin	.408	33	.000	.610	33	.000
MaturasiKanan	.337	33	.000	.735	33	.000
MaturasiKiri	.337	33	.000	.735	33	.000
AnteKanan	.186	33	.005	.890	33	.003
AnteKiri	.163	33	.026	.886	33	.002
SupKanan	.156	33	.040	.885	33	.002
SupKiri	.152	33	.051	.925	33	.025
PosteKanan	.222	33	.000	.868	33	.001
PosteKiri	.227	33	.000	.880	33	.002

a. Lilliefors Significance Correction

## Correlations

		Umur	MaturasiKanan	MaturasiKiri
Spearman's rho Umur	Correlation Coefficient	1.000	.820**	.820**
	Sig. (2-tailed)	.	.000	.000
	N	33	33	33
Maturasi Kanan	Correlation Coefficient	.820**	1.000	1.000
	Sig. (2-tailed)	.000	.	.000
	N	33	33	33
Maturasi Kiri	Correlation Coefficient	.820**	1.000	1.000
	Sig. (2-tailed)	.000	.000	.
	N	33	33	33

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**JenisKelamin \* MaturasiKanan****Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7.312 <sup>a</sup>	2	.026
Likelihood Ratio	7.328	2	.026
Linear-by-Linear Association	6.139	1	.013
N of Valid Cases	33		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 2.18.

**JenisKelamin \* MaturasiKiri****Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7.312 <sup>a</sup>	2	.026
Likelihood Ratio	7.328	2	.026
Linear-by-Linear Association	6.139	1	.013
N of Valid Cases	33		

**Kruskal-Wallis Test****Ranks**

	MaturasiKanan	N	Mean Rank
AnteKanan	CM0	6	3.50
	CM1	9	13.06
	CM2	18	23.47
	Total	33	
SupKanan	CM0	6	3.50
	CM1	9	11.50
	CM2	18	24.25
	Total	33	
PosteKanan	CM0	6	3.50
	CM1	9	13.44
	CM2	18	23.28
	Total	33	

**Test Statistics<sup>a,b</sup>**

	AnteKanan	SupKanan	PosteKanan
Kruskal-Wallis H	21.505	25.048	21.077
df	2	2	2
Asymp. Sig.	.000	.000	.000

a. Kruskal Wallis Test

b. Grouping Variable: MaturasiKanan

**Kruskal-Wallis Test****Ranks**

	MaturasiKiri	N	Mean Rank
AnteKiri	CM0	6	3.50
	CM1	11	14.00
	CM2	16	24.13
	Total	33	
SupKiri	CM0	6	4.50
	CM1	11	14.27
	CM2	16	23.56
	Total	33	
PosteKiri	CM0	6	4.00
	CM1	11	13.00
	CM2	16	24.63
	Total	33	

**Test Statistics<sup>a,b</sup>**

	AnteKiri	SupKiri	PosteKiri
Kruskal-Wallis H	21.695	18.620	23.208
df	2	2	2
Asymp. Sig.	.000	.000	.000

a. Kruskal Wallis Test

b. Grouping Variable: MaturasiKiri

**Kruskal-Wallis Test****Ranks**

	PatologisKanan	N	Mean Rank
Kelompok_Usia	Normal	56	33.44
	Flattening	10	53.55
	Erosi	7	49.86
	Osteofit	1	46.50
	Sklerosis	1	46.50
	Total	75	

**Test Statistics<sup>a,b</sup>**

	Kelompok_Usia
Kruskal-Wallis H	11.382
df	4
Asymp. Sig.	.023

a. Kruskal Wallis Test

b. Grouping Variable: PatologisKanan

**Kruskal-Wallis Test****Ranks**

	PatologisKiri	N	Mean Rank
Kelompok_Usia	Normal	51	32.43
	Flattening	10	48.85
	Erosi	11	49.50
	Osteofit	3	54.33
	Total	75	

	Kelompok_Usia
Kruskal-Wallis H	12.110
df	3
Asymp. Sig.	.007

a. Kruskal Wallis Test

b. Grouping Variable: PatologisKiri

**JenisKelamin \* PatologisKanan****Chi-Square Tests**

	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	1.093 <sup>a</sup>	4	.895
Likelihood Ratio	1.695	4	.792
Linear-by-Linear Association	.770	1	.380
N of Valid Cases	75		

a. 7 cells (70.0%) have expected count less than 5. The minimum expected count is .32.

**JenisKelamin \* PatologisKiri****Chi-Square Tests**

	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	4.019 <sup>a</sup>	3	.259
Likelihood Ratio	4.365	3	.225
Linear-by-Linear Association	.274	1	.601
N of Valid Cases	75		

a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is .96.

## JenisKelamin \* PatologisKanan \* Kelompok\_Usia

### Chi-Square Tests

Kelompok_Usia		Value	df	Asymptotic Significance (2- sided)	Exact (2-Sig. (2- sided)	Exact (1- sided)
15-19	Pearson Chi-Square	. <sup>b</sup>				
	N of Valid Cases	17				
20-24	Pearson Chi-Square	.413 <sup>c</sup>	1	.521		
	Continuity Correction <sup>d</sup>	.000	1	1.000		
	Likelihood Ratio	.674	1	.412		
	Fisher's Exact Test				1.000	.727
	Linear-by-Linear Association	.375	1	.540		
	N of Valid Cases	11				
25-44	Pearson Chi-Square	1.267 <sup>e</sup>	4	.867		
	Likelihood Ratio	1.770	4	.778		
	Linear-by-Linear Association	.057	1	.812		
	N of Valid Cases	36				
45-59	Pearson Chi-Square	.497 <sup>f</sup>	2	.780		
	Likelihood Ratio	.754	2	.686		
	Linear-by-Linear Association	.393	1	.531		
	N of Valid Cases	11				
Total	Pearson Chi-Square	1.093 <sup>a</sup>	4	.895		
	Likelihood Ratio	1.695	4	.792		
	Linear-by-Linear Association	.770	1	.380		
	N of Valid Cases	75				

a. 7 cells (70.0%) have expected count less than 5. The minimum expected count is .32.

b. No statistics are computed because PatologisKanan is a constant.

c. 3 cells (75.0%) have expected count less than 5. The minimum expected count is .27.

d. Computed only for a 2x2 table

e. 8 cells (80.0%) have expected count less than 5. The minimum expected count is .28.

f. 6 cells (100.0%) have expected count less than 5. The minimum expected count is .27.

### JenisKelamin \* PatologisKiri \* Kelompok\_Usia

#### Chi-Square Tests

Kelompok_Usia		Value	df	Asymptotic Significance (2-sided)
15-19	Pearson Chi-Square	. <sup>b</sup>		
	N of Valid Cases	17		
20-24	Pearson Chi-Square	1.547 <sup>c</sup>	2	.461
	Likelihood Ratio	2.306	2	.316
	Linear-by-Linear Association	1.200	1	.273
	N of Valid Cases	11		
25-44	Pearson Chi-Square	10.288 <sup>d</sup>	3	.016
	Likelihood Ratio	11.247	3	.010
	Linear-by-Linear Association	5.993	1	.014
	N of Valid Cases	36		
45-59	Pearson Chi-Square	.497 <sup>e</sup>	3	.920
	Likelihood Ratio	.754	3	.860
	Linear-by-Linear Association	.301	1	.583
	N of Valid Cases	11		
Total	Pearson Chi-Square	4.187 <sup>a</sup>	3	.242
	Likelihood Ratio	4.524	3	.210
	Linear-by-Linear Association	.508	1	.476
	N of Valid Cases	75		

a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is .96.

b. No statistics are computed because PatologisKiri is a constant.

c. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .27.

d. 6 cells (75.0%) have expected count less than 5. The minimum expected count is .56.

e. 8 cells (100.0%) have expected count less than 5. The minimum expected count is .27.