

Peningkatan akurasi diagnosis fibroadenoma dan tumor filodes jinak payudara pada sediaan core biopsy dengan menggunakan skoring gambaran histopatologik = Increasing diagnostic accuracy of fibroadenoma and benign phyllodes breast tumor in core biopsy using histopathologic scoring system

Weny Yusnita, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20424629&lokasi=lokal>

Abstrak

ABSTRAK
Latar belakang: Fibroadenoma dan tumor filodes jinak merupakan tumor fibroepitelial dengan gambaran histopatologik yang tumpang tindih. Saat ini banyak pengambilan jaringan tumor payudara secara core biopsy, termasuk pada tumor fibroepitelial. Jumlah jaringan yang sedikit dan gambaran histopatologik yang tumpang tindih sering menyulitkan Dokter Spesialis Patologi Anatomi dalam menentukan diagnosis fibroadenoma dan tumor filodes jinak. Penelitian ini bertujuan untuk mengetahui gambaran histopatologik apa saja yang bermakna untuk mendiagnosis fibroadenoma dan tumor filodes jinak dan untuk menguji apakah diagnosis fibroadenoma dan tumor filodes jinak pada core biopsy dengan menggunakan sistem skoring lebih baik dibandingkan tanpa skoring.

Bahan dan cara: Penelitian ini merupakan suatu uji diagnostik. 57 kasus fibroadenoma dan tumor filodes jinak yang memiliki slide core biopsy dan mastektomi/lumpektomi/eksisi dinilai ulang tanpa sistem skoring dan menggunakan skoring. Gambaran histopatologik yang dinilai pada sistem skoring adalah selularitas stroma, atipia inti, fragmentasi jaringan, infiltrasi lemak, mitosis dan heterogenitas stroma. Kemudian dilakukan analisis statistik, uji diagnostik dan uji kappa.

Hasil: Selularitas stroma, heterogenitas stroma dan fragmentasi jaringan lebih sering ditemukan pada tumor filodes jinak dan berbeda bermakna ($p=0,001$; $p=0,000$; $p=0,021$). Spesifisitas pada sistem skoring meningkat sebesar 17,9%. Nilai duga positif dan nilai duga negatif pada sistem skoring meningkat sebesar 11,9% dan 5,1%. Area under curve (AUC) meningkat 8,9%. Uji Cohen's kappa antara diagnosis core biopsy tanpa dan dengan skoring bernilai rendah (0,545).

Kesimpulan: Adanya peningkatan spesifisitas, nilai duga positif dan AUC menunjukkan bahwa penilaian core biopsy sistem skoring lebih baik dibandingkan tanpa skoring dan dapat menjadi acuan untuk diagnosis fibroadenoma dan tumor filodes jinak.

ABSTRACT
Background: Fibroadenoma and benign phyllodes tumor are kinds of fibroepithelial tumor which have overlapping histopathological features. Recently, core biopsy is commonly performed to determine breast tumor, including fibroepithelial tumor. Small amount of tissue and overlapped histopathological features often complicate the Pathologist in diagnosing both. This study aims to describe the histopathological appearance which needed to diagnose fibroadenoma and benign phyllodes tumor and to verify if the diagnosis of fibroadenoma and benign phyllodes tumor in core biopsy using

scoring system is more accurate than without scoring system.

Method: This study was a diagnostic test, in which 57 cases of fibroadenoma and benign phyllodes tumor which had undergone core biopsy and mastectomy/excision were re-assessed using and without using scoring system. Histopathologic features which assessed using scoring system were stromal cellularity, nuclear atypia, tissue fragmentation, fat infiltration, mitotic figure, stromal heterogeneity. Analytical statistic, diagnostic test, accuracy test and Kappa test were done.

Results: Stromal cellularity, stromal heterogeneity and tissue fragmentation mostly found in benign phyllodes tumor and significantly different ($p=0,001$; $p=0,000$; $p=0,021$). There were significant differences between stromal cellularity ($p=0,001$), stromal heterogeneity ($p=0,000$), and tissue fragmentation ($p=0,021$) in diagnosis of benign phyllodes tumor. Specificity in scoring system increased by 17,9 %. Positive predictive value, negative predictive value and accuracy increased in scoring system (11,9% and 5,1%). Area under curve (AUC) increased by 8,9%. Cohen's Kappa test between core biopsy diagnosis without using and using scoring system had low result(0,545).

Conclusion: The increasing of specificity, positive predictive value, accuracy and AUC proved that core biopsy with scoring system is more accurate than without scoring. This can be used as reference to diagnose fibroadenoma and benign phyllodes tumor.;Background: Fibroadenoma and benign phyllodes tumor are kinds of fibroepithelial tumor which have overlapping histopathological features. Recently, core biopsy is commonly performed to determine breast tumor, including fibroepithelial tumor. Small amount of tissue and overlapped histopathological features often complicate the Pathologist in diagnosing both. This study aims to describe the histopathological appearance which needed to diagnose fibroadenoma and benign phyllodes tumor and to verify if the diagnosis of fibroadenoma and benign phyllodes tumor in core biopsy using scoring system is more accurate than without scoring system.

Method: This study was a diagnostic test, in which 57 cases of fibroadenoma and benign phyllodes tumor which had undergone core biopsy and mastectomy/excision were re-assessed using and without using scoring system. Histopathologic features which assessed using scoring system were stromal cellularity, nuclear atypia, tissue fragmentation, fat infiltration, mitotic figure, stromal heterogeneity. Analytical statistic, diagnostic test, accuracy test and Kappa test were done.

Results: Stromal cellularity, stromal heterogeneity and tissue fragmentation mostly found in benign phyllodes tumor and significantly different ($p=0,001$; $p=0,000$; $p=0,021$). There were significant differences between stromal cellularity ($p=0,001$), stromal heterogeneity ($p=0,000$), and tissue fragmentation ($p=0,021$) in diagnosis of benign phyllodes tumor. Specificity in scoring system increased by 17,9 %. Positive predictive value, negative predictive value and accuracy increased in scoring system (11,9% and 5,1%). Area under curve (AUC) increased by 8,9%. Cohen's Kappa test between core biopsy diagnosis without using and using scoring system had low result(0,545).

Conclusion: The increasing of specificity, positive predictive value, accuracy and AUC proved that core biopsy with scoring system is more accurate than without scoring. This can be used as reference to

diagnose fibroadenoma and benign phyllodes tumor.;Background: Fibroadenoma and benign phyllodes tumor are kinds of fibroepithelial tumor which have overlapping histopathological features. Recently, core biopsy is commonly performed to determine breast tumor, including fibroepithelial tumor. Small amount of tissue and overlapped histopathological features often complicate the Pathologist in diagnosing both. This study aims to describe the histopathological appearance which needed to diagnose fibroadenoma and benign phyllodes tumor and to verify if the diagnosis of fibroadenoma and benign phyllodes tumor in core biopsy using scoring system is more accurate than without scoring system.

Method: This study was a diagnostic test, in which 57 cases of fibroadenoma and benign phyllodes tumor which had undergone core biopsy and mastectomy/excision were re-assessed using and without using scoring system. Histopathologic features which assessed using scoring system were stromal cellularity, nuclear atypia, tissue fragmentation, fat infiltration, mitotic figure, stromal heterogeneity. Analytical statistic, diagnostic test, accuracy test and Kappa test were done.

Results: Stromal cellularity, stromal heterogeneity and tissue fragmentation mostly found in benign phyllodes tumor and significantly different ($p=0,001$; $p=0,000$; $p=0,021$). There were significant differences between stromal cellularity ($p=0,001$), stromal heterogeneity ($p=0,000$), and tissue fragmentation ($p=0,021$) in diagnosis of benign phyllodes tumor. Specificity in scoring system increased by 17,9 %. Positive predictive value, negative predictive value and accuracy increased in scoring system (11,9% and 5,1%). Area under curve (AUC) increased by 8,9%. Cohen's Kappa test between core biopsy diagnosis without using and using scoring system had low result(0,545).

Conclusion: The increasing of specificity, positive predictive value, accuracy and AUC proved that core biopsy with scoring system is more accurate than without scoring. This can be used as reference to diagnose fibroadenoma and benign phyllodes tumor.;Background: Fibroadenoma and benign phyllodes tumor are kinds of fibroepithelial tumor which have overlapping histopathological features. Recently, core biopsy is commonly performed to determine breast tumor, including fibroepithelial tumor. Small amount of tissue and overlapped histopathological features often complicate the Pathologist in diagnosing both. This study aims to describe the histopathological appearance which needed to diagnose fibroadenoma and benign phyllodes tumor and to verify if the diagnosis of fibroadenoma and benign phyllodes tumor in core biopsy using scoring system is more accurate than without scoring system.

Method: This study was a diagnostic test, in which 57 cases of fibroadenoma and benign phyllodes tumor which had undergone core biopsy and mastectomy/excision were re-assessed using and without using scoring system. Histopathologic features which assessed using scoring system were stromal cellularity, nuclear atypia, tissue fragmentation, fat infiltration, mitotic figure, stromal heterogeneity. Analytical statistic, diagnostic test, accuracy test and Kappa test were done.

Results: Stromal cellularity, stromal heterogeneity and tissue fragmentation mostly found in benign phyllodes tumor and significantly different ($p=0,001$; $p=0,000$; $p=0,021$). There were significant differences between stromal cellularity ($p=0,001$), stromal heterogeneity ($p=0,000$), and tissue fragmentation ($p=0,021$) in diagnosis of benign phyllodes tumor. Specificity in scoring system increased by

17,9 %. Positive predictive value, negative predictive value and accuracy increased in scoring system (11,9% and 5,1%). Area under curve (AUC) increased by 8,9%. Cohen's Kappa test between core biopsy diagnosis without using and using scoring system had low result(0,545).

Conclusion: The increasing of specificity, positive predictive value, accuracy and AUC proved that core biopsy with scoring system is more accurate than without scoring. This can be used as reference to diagnose fibroadenoma and benign phyllodes tumor.