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СИНДЕКАН-1 – ПРЕДИКТИВНЫЙ МАРКЕР БИОХИМИЧЕСКОГО РЕЦИДИВА ПОСЛЕ РАДИКАЛЬНОЙ ПРОСТАТЭКТОМИИ

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Аннотация. Рак предстательной железы (РПЖ) остается актуальной проблемой современной онкоурологии в связи с высокими показателями заболеваемости и смертности. Цель исследования – анализ роли синдекана-1 (SDC1, CD138) в развитии биохимического рецидива и прогрессии заболевания у пациентов с РПЖ после радикальной простатэктомии (РПЭ).

Для иммуногистохимического (ИГХ) исследования использован материал пункционных биопсий пациентов с РПЖ до РПЭ и препаратов простаты 20 мужчин с РПЖ, перенесших РПЭ. По результатам 24-36-месячного ПСА-мониторинга стратифицировали группы пациентов: 1 группа – с безрецидивным течением (14 пациентов); 2 группа – с развитием биохимического рецидива и клиническими признаками рецидива (6 пациентов). Для ИГХ-исследования использовали готовые к применению антитела CD138 (клон MI 15) и систему визуализации EnVision FLEX (Dako, Дания). Постановка ИГХ-реакций, интерпретация полученных результатов проведены по общепринятым правилам.

Результаты исследования показали, что безрецидивное течение РПЖ после радикальной простатэктомии ассоциировано с выраженной мембранной экспрессией синдекана-1 в тканях предстательной железы, выявленной до хирургического лечения. Развитие биохимического рецидива после РПЭ ассоциировано с цитоплазматической экспрессией SDC1 в опухолевых клетках до операции. Таким образом, изменение паттерна экспрессии SDC1 с мембранного на цитоплазматический до РПЭ является независимым предиктором неблагоприятного прогноза при РПЖ.

Повышенная цитоплазматическая экспрессия синдекана-1 ассоциирована с агрессивными формами РПЖ и является независимым предиктором биохимического рецидива. Оценка экспрессии синдекана-1 в ткани предстательной железы является многообещающим инструментом для стратификации риска и мониторинга лечения при РПЖ.

Ключевые слова: рак предстательной железы, биохимический рецидив, предиктивные маркеры, синдекан-1.

SYNDECAN-1 AS A PREDICTIVE MARKER OF BIOCHEMICAL RECURRENCE AFTER RADICAL PROSTATECTOMY

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Abstract. Prostate cancer (PC) remains a pressing problem in modern oncology due to its high morbidity and mortality rates.

The purpose of the study is to analyze the role of syndecan-1 (SDC1, CD138) in the development of biochemical recurrence (BCR) and disease progression in patients with prostate cancer after radical prostatectomy (RP).

For the immunohistochemical (IHC) study, we used material from puncture biopsies of patients with prostate cancer before RP and prostate preparations from 20 men with prostate cancer who underwent RP. Based on the

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results of 24-36-month PSA monitoring, patient groups were stratified: Group 1 – with a relapse-free course (14 patients); Group 2 – with the development of biochemical relapse and clinical signs of relapse (6 patients). Ready-to-use CD138 antibodies (clone MI 15) and the EnVision FLEX visualization system (Dako, Denmark) were used for the IHC study. IHC reactions were set up and the results were interpreted according to generally accepted rules.

The study showed that recurrence-free prostate cancer after radical prostatectomy is associated with pronounced membranous expression of syndecan-1 in prostate tissue detected before surgery. The development of biochemical recurrence after radical prostatectomy is associated with cytoplasmic expression of SDC1 in tumor cells before surgery. Thus, a change in the SDC1 expression pattern from membranous to cytoplasmic before radical prostatectomy is an independent predictor of an unfavorable prognosis in prostate cancer.

Increased cytoplasmic expression of syndecan-1 is associated with aggressive forms of prostate cancer and is an independent predictor of biochemical recurrence. Assessing syndecan-1 expression in prostate tissue is a promising tool for risk stratification and treatment monitoring in prostate cancer.

Keywords: prostate cancer, biochemical recurrence, predictive markers, syndecan-1.

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