

## REVIEW ARTICLE

### Roles of nucleolin. Focus on cancer and anti-cancer therapy

Stage	Effect	Mechanism
Carcinogenesis	Facilitate	Promote and regulate the oncogenesis-related TGF- $\beta$ pathway and EGF pathway. Regulate high-risk promoters of cancer initiation.
Proliferation and survival	Facilitate	Interact with DNA repair proteins to maintain DNA stability. Regulate the stability of apoptosis-related mRNAs to enhance anti-apoptosis. Bind to apoptosis-related ligands to prevent apoptosis.
Infiltration and metastasis	Facilitate	Regulate the process of EMT and the expression of MMPs. Modulate the initiation and transduction of EGFR and CXCR4 signaling.
Angiogenesis	Facilitate	Up-regulate the level of VEGF and HIF1 $\alpha$ .

TGF- $\beta$  - transforming growth factor  $\beta$ , EGF - epidermal growth factor, EMT - epithelial mesenchymal transition, VEGF - vascular endothelial growth factor, MMPs - modulates matrix metalloproteinases, EGFR - epidermal growth factor receptor, CXCR4 - chemokine receptor type 4, HIF1 $\alpha$  - Hypoxia-inducible factor 1 alpha

*The effects of nucleolin in cancers*

Chen & Xu describe how nucleolin act functions in cancer development and describe nucleolin-dependent anti-cancer therapies. They conclude that the level and localization of nucleolin is aberrant and contributes to the progression of cancer, including carcinogenesis, proliferation, angiogenesis, and metastasis. Thus, nucleolin is a promising target for anti-cancer therapy. Although some achievements have been gained, there are many challenges.

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## ORIGINAL ARTICLES

### Open globe eye injury characteristics and prognostic factors in Jazan, Saudi Arabia

Variables	Odds ratio*	95% confidence intervals	P-value
Iris injury	0.909	0.410 - 2.212	0.678
Hyphema	1.715	0.756 - 3.889	0.215
Aphakia	0.180	0.051 - 0.631	0.007
Retinal damage	0.062	0.007 - 0.555	0.013
Vitreous haemorrhage	0.266	0.90 - 0.787	0.017
Endophthalmitis	0.236	0.025 - 2.266	0.121
<b>Injury zones</b>			
Zone I	2.447	1.062 - 5.640	0.036
Zone II	1.095	0.169 - 1.377	0.838
Zone III	0.092	0.018 - 0.460	0.004
<b>Injury nature</b>			
Rupture	1.686	0.701 - 4.055	0.244
Penetration	1.432	0.615 - 3.336	0.405
Perforation	0.652	0.262 - 1.621	0.357

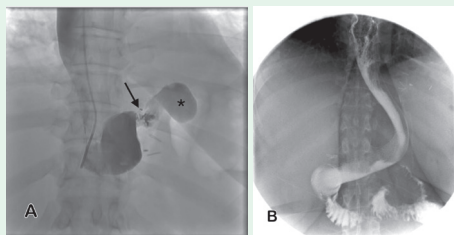
\*Controlling for age, gender, time between initial and final visual acuity tests, and time between injury onset and hospital admission

Makhrash & Gosadi evaluate characteristics and prognostic factors of open globe injuries (OGI) presented to King Fahad Specialist Hospital in the Jazan region, Saudi Arabia. Number of included cases was 120. Most frequently reported causes of injury were blunt trauma (20%) and shattered glass (18.3%). Approximately half of the cases were reported to have iris injuries or hyphema. Most cases suffered penetration (37.5%) of the eye globe. They conclude that Zone I injury appears to have a better prognostic effect on visual acuity where injuries related to Zone III were associated with worse prognostic outcomes.

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*Multivariate analysis of the prognostic factors associated with improvements in the visual acuity of 120 open globe injury cases*

### Gastroesophageal stenting for the management of post sleeve gastrectomy leak. A single institution experience



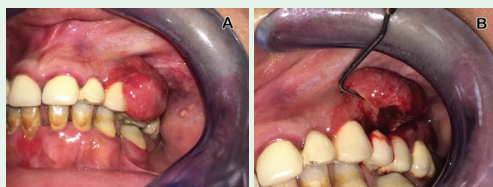
*Post removal esophagogram with no residual leak*

Guzaiz et al found that gastroesophageal stenting as a primary measure after diagnosis of early post sleeve gastrectomy leak appears to offer a safe and effective alternative option in obviating repeat surgical interventions. Minimally invasive interventions may still be required for the management of persistent leak. Stent placement was technically successful in all patients. Stent migration occurred in 6 patients (50%). There is a tendency for stent migration with shorter stent length. The mean duration of stenting was 60.5 days (14-137 days). All patients underwent stent removal and resumed oral intake with no recurrence of leak at a mean follow up time of 190 days (14-410 days).

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## CASE REPORT

### Excision of oral pyogenic granuloma in a diabetic patient with 940nm diode laser



*A) Large gingival exophytic ulcerated and lobulated mass covering the buccal surfaces of the teeth and extending into the vestibule. B) Reflecting the mass to examine the point of origin.*

Al-Mohaya & Al-Malik present a case of gingival Pyogenic granuloma (PG) in a 51-year-old uncontrolled diabetic woman. The lesion was excised successfully with a 940nm diode laser as a conservative and non-stressful procedure that resulted in a bloodless surgical and post-surgical course with rapid healing, minimal pain, swelling, and scarring. The 940nm Diode laser offers a new efficient noninvasive tool for excising oral soft tissue lesions, especially in medically compromised patients.

*see page 1395*