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## **Innovations in the Field of Surgical Pathology**

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Surgical pathology is that the study of tissues removed from living patients during procedure to assist with diagnosing a disease and choose a therapy plan. For example, when performing breast malignancy medical procedure, a surgical pathologist's test of tissues removed during a medical procedure can assist the specialist with deciding whether to remove lymph nodes under the arm as well. Surgical pathology also includes subdivisions like dermatopathology, cytopathology, hematopathology, neuropathology and pediatric pathology.

Surgical pathology involves both the physical test of the tissue with the naked eye, as well as inspecting processed tissue under a microscope. New methods of test of tissue and cell specimens include molecular diagnostics (DNA/RNA investigation). This includes breaking down DNA and proteins in the blood

The present volume 3, issue 3 various aspects were discussed by the authors from different parts of the world. In the Short communication article entitled "Wound Pathophysiology: Insights of Ca<sup>2+</sup> Signalling and Cellular Senescence Mechanisms in Healing and Regeneration". Dr Rajiv Kumar explained regarding the Cellular senescence and calcium signalling which are interrelated phenomena of cellular events. Cellular senescence is said to stress, alongside it, intracellular calcium signalling features a priority with cellular senescence. In this author explained about physiological and pathological processes of senescent cells and these cells also participate in anti-senescent therapies. Senescent cells participate in many phenotypic alterations like metabolic reprogramming, and autophagy modulation [1]. The phenomenon of intercellular communication may be a key feature of a cellular system within the pathophysiology conditions for the transfer of varied messages.

In an emergency, the injury-induced calcium signalling deals with originating harsh conditions. The most important phenomena of calcium signalling and cellular senescence ensued to initiate the satellite cells to participate within the aforementioned signalling pathways to inductee muscle regeneration. Finally author concluded that, the quickly tempted senescence is useful for regeneration and acute wound repair and the importance of planned strategies for managing senescence in chronic wounds and interrelated cutaneous pathologies counting on the physiological conditions. In the case report article, Dr Saleem Abdel Backi briefly explained about Incidental Finding of Gastric Heterotopic Pancreas during Laparoscopic Sleeve Gastrectomy. Heterotropic Pancreas (HP), also termed as ectopic, accessory, or aberrant pancreas is by definition the presence of pancreatic tissue outside its normal anatomical location with no direct blood supply connection with the main pancreas. In the literature, there's increase within the incidence of pathological findings during laparoscopic sleeve gastrectomy. Patients with Heterotropic Pancreas (HP) are usually asymptomatic and are usually discovered incidentally during laparotomy for other causes, endoscopy of the gastrointestinal tract, or at autopsy. Heterotropic Pancreas (HP) is typically found within the antrum toward the greater curvature as a submucosal lesion mimicking Gastro Intestinal Stromal Tumor (GIST).

Author also explained about case presentation of a 52-year-old female patient with hypertension and hypothyroidism as past medical history and a weight of 122 kg and a height of 1.62 meters resulting in a body mass index of 46.49 kg/m<sup>2</sup> who presented to undergo bariatric surgery after failing to lose weight by dietary regimens and life style modifications [2]. In the case of an incidental HP found during surgery, local excision is that the preferred treatment since HP is in danger of becoming symptomatic or malignant when radical surgery is considered.

Finally author concluded that Laparoscopic Sleeve Gastrectomy (LSG) is increasingly being performed so one can expect increase in incidentalomas during this bariatric surgery. HP should be considered within the medical diagnosis of an incidental gastric lesion found during LSG.

## References

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