



# Occlusion Guidelines for the Completely Edentulous Implant Patient

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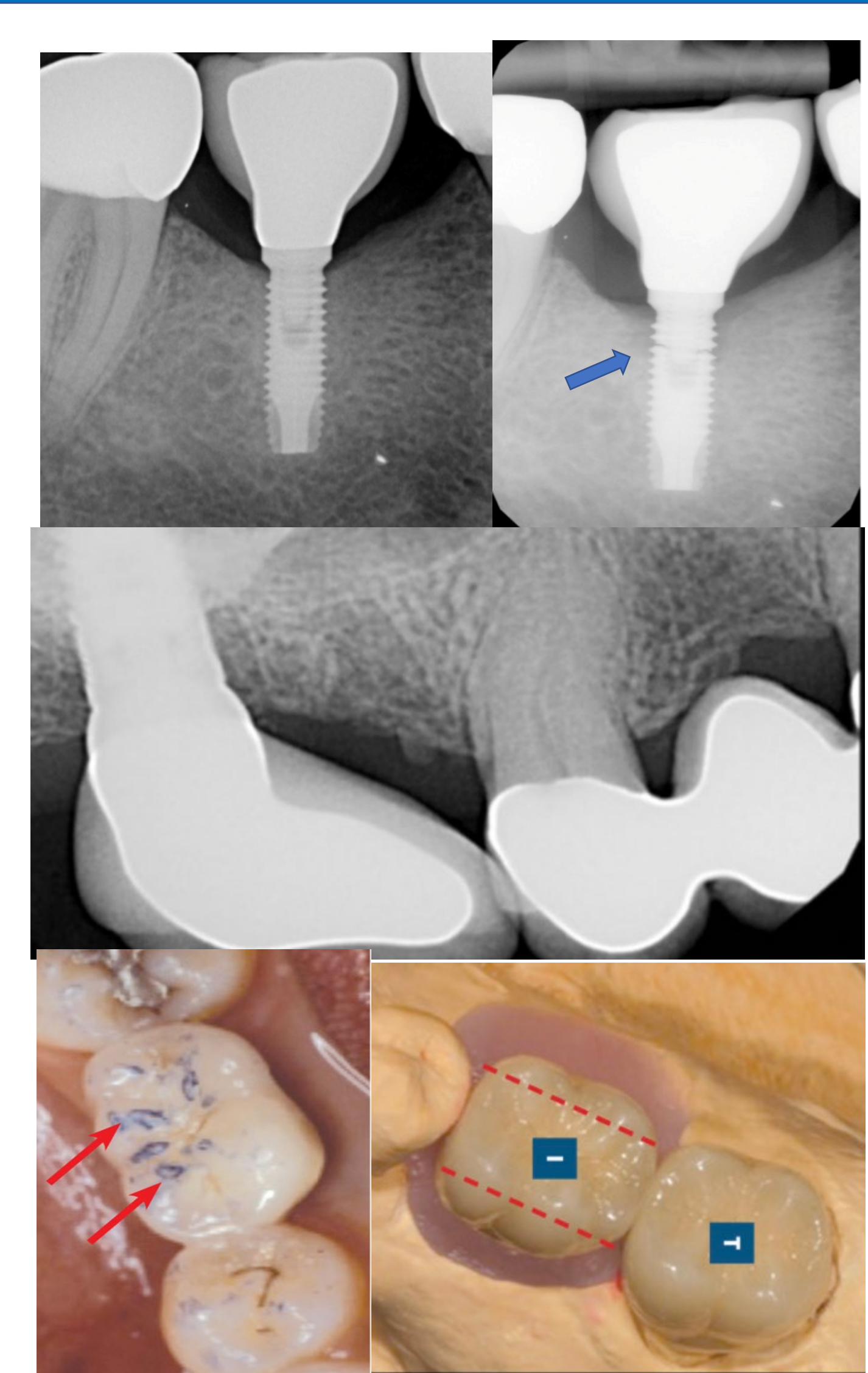
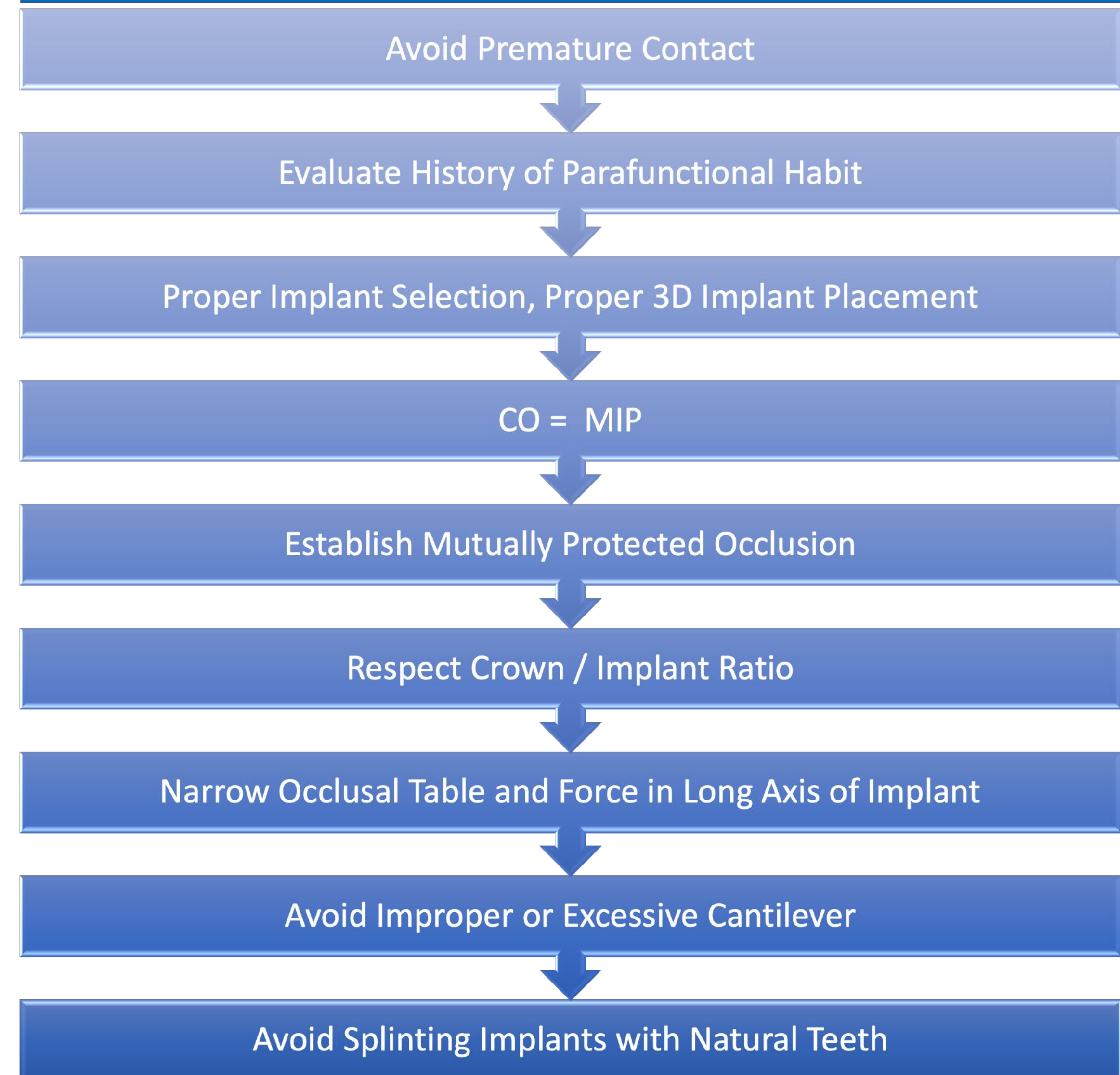
## INTRODUCTION AND PURPOSE

One criterion for long-term success of implant-supported prostheses is the establishment of a proper occlusal scheme. It is imperative for clinicians to be well-versed in these different concepts when rehabilitating with implant prostheses. The importance of occlusion can be neglected due to a limited understanding and lack of available data from the literature. The aim of this research is to provide literature based occlusal scheme guidelines for the treatment of edentulous patients with dental implants.

## METHODS

An electronic search was performed in several databases including PubMed/ Medline, EMBASE, Cochrane Library, and Scopus. The key words were “implant occlusion”, “implant occlusal scheme”, “implant overload”, and “implant complications”. A total of 35 articles qualified for the inclusion criteria of the current research.

## RESULTS: IMPLANT OCCLUSAL GUIDELINES



## OCCLUSAL SCHEME

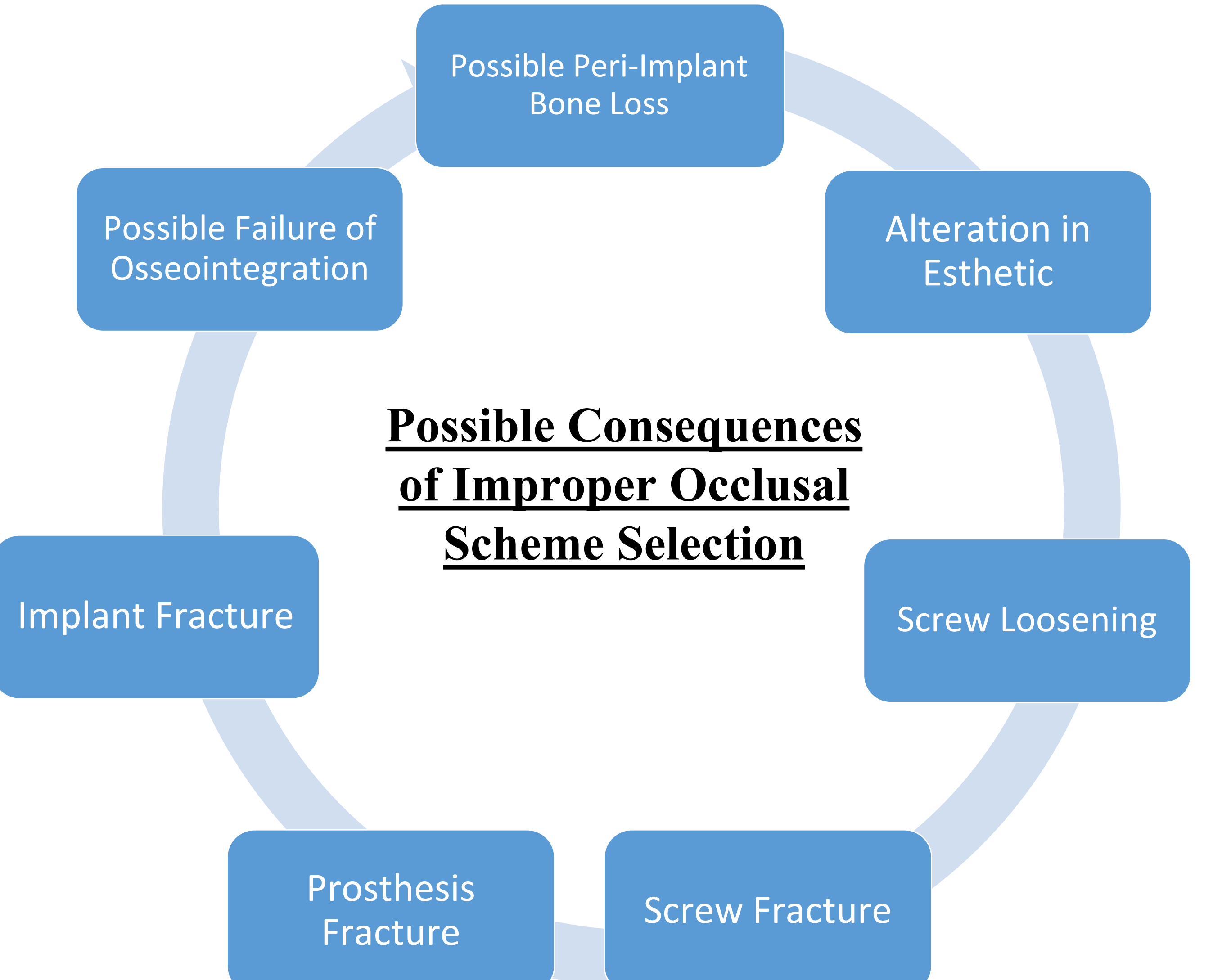
Prostheses	Bilateral Balanced Occlusion	Canine Guidance	Group Function
Max ISFDP Man CD	R	NR	NR
Max CD Man ISFDP	R	NR	NR
Max ISFDP Man ISFDP	P	R	P
Max ISFDP Man ND	NR	R	P
Max ND Man ISFDP	NR	R	P

Legend: Max (Maxilla), Man (Mandible), CD (Complete Denture), TS-OVD (Tissue Supported Overdenture), IS-OVD (Implant Supported Overdenture) ISFDP (Implant Supported Fixed Partial Denture), R (Recommended), NR (Non-Recommended), P (Possible)

Prostheses	Bilateral Balanced Occlusion	Canine Guidance	Group Function
Max TS-OVD Man CD	R	NR	NR
Max CD Man TS OVD	R	NR	NR
Max TS-OVD Max TS-OVD	R	NR	NR
Max TS OVD Man ND	R	P	NR
Max ND Man TS-OVD	R	P	P
Max TS-OVD Man ISFDP	R	P	P
Max ISFDP Man TS-OVD	R	P	P
Max IS-OVD Man CD	R	NR	NR
Max CD Man IS-OVD	R	NR	NR
Man IS-OVD Max IS-OVD	P	R	P
Max IS-OVD Man ND	P	R	P
Max ND Man IS-OVD	P	R	P
Max IS-OVD Man ISFDP	P	R	P
Max ISFDP Man IS-OVD	P	R	P
Max IS-OVD Man TS-OVD	R	P	P

## CONCLUSIONS

- The literature review revealed that a proper preoperative occlusal evaluation is important for the long-term success of implant prostheses. Therefore, it is essential to analyze patient's occlusion and evidence of parafunctional habits.
- When a patient presents with a CD, it is always advisable to adopt bilateral balanced occlusion to enhance stability.
- For OVD's, the type of support is determined on the number of implants. In TS-OVD bilateral balanced is recommended while in IS-OVD, there is more flexibility on the type of scheme. Careful evaluation of opposing arch is required.
- For ISFDP, clinical judgment is necessary when analyzing the opposing arch. Recent research suggest that group function may have 3 times more mechanical complications compared to canine guidance in patients with implants.



## Possible Consequences of Improper Occlusal Scheme Selection