The purpose of this chapter is twofold. First, it is to describe the team approach to the radiological study of the velopharyngeal portal. This portion of the chapter is included for the benefit of the radiologist who has had little or no exposure to the cleft palate team approach. For as noted by Skolnick in 1977:

To most radiologists, the roentgen examination of the velopharyngeal portal is an entirely new procedure. This is not a technique learned during one’s residency, and it is not a technique discussed at radiological meetings or in the radiological journals. There are probably too few needs for such studies to teach the procedure as a routine one to the radiological community. Furthermore, the radiologist is not accustomed to working with other than roentgenological data. The recording of speech and the understanding of the types of speech tasks that will produce specific movements in the structures of the velopharyngeal portal complicate the examination and put additional burdens on the radiologist. Also, for this examination to be successful, it has to be an interactive procedure in which the speech tasks may be modified as the study is being performed because of particular events that are observed. Thus, the radiologist is now being asked to perform as a speech pathologist as well. In addition, except for specialized pediatric radiologists, most radiologists are not accustomed to working with small children, especially in situations where the full cooperation of an unsedated patient is required in order to perform the study.

A second purpose of this chapter is to describe the composition and functions of the cleft palate team. In doing so, we will focus on the cooperative nature of the videofluoroscopic examination.

Team Approach to Management

Team management of cleft lip and palate was originated by H.K. Cooper, founder of the Lancaster Cleft Palate Clinic in the early 1930s (2). Cooper recognized that a cooperative approach to cleft palate management yielded better patient care than could be provided by professionals working in isolation.

The number and kinds of specialties associated with a cleft palate team may vary, depending upon both clinical needs and local talents. The American Cleft Palate Association specified that a cleft palate team be minimally staffed by a plastic surgeon, speech-language pathologist, and dentist. However, it is not uncommon for cleft palate teams to include many more than only these core specialists. The expanded cleft palate team may contain an orthodontist, otolaryngologist, prosthodontist, pediatrician, psychologist, radiologist, geneticist, social worker, and pediatric nurse practitioner, to name but a few. When craniofacial surgery is performed, a neurologist, neurosurgeon, and ophthalmologist may also be among those serving on the team.

The advantages of a cooperative approach to cleft palate habilitation are widely recognized, primarily because optimal care results when specialists de-
velop a coordinated approach to treatment. In con-
trast, cleft palate habilitation performed in isolation
is often characterized by incomplete information
and discoordination such that aspects of treatment
may be ill-timed and counterproductive.

In addition to improved clinical care, the cleft palate team approach offers conveniences for pa-
tients and their families. As McWilliams et al. (3)
note:

The major advantages of a team, in addition to coordi-
nated care, are that the family can often see a number of
specialists at one appointment; follow-up can be man-
gaged in a controlled system; the family associates all
aspects of care with one program, and only one contact
has to be made if emergencies arise.

Team Interaction Models

Cleft palate teams may employ one or more of a
variety of interaction models. The choice of the
model may be determined by such factors as the
history of team interaction, the size and composi-
tion of the team, the physical characteristics of the
clinic, and the complexity of the patient’s prob-
lems.

One of the most common approaches to team
decision-making occurs when the cleft palate team
meets as a group in one setting at a prescribed time.
The team members examine the patient and then
together as a group formulate a treatment strategy.

Another type of interaction model incorporates
private meetings between the patient and each spe-
cialist throughout the course of a scheduled clinic
session. During this “clinic,” team members work
separately and simultaneously in a common build-
ing or suite of offices. When all of the scheduled
patients have been examined, the team members
convene to summarize findings and coordinate treat-
ment.

A variation on this theme occurs when team
members read each others’ notes on the patient’s
chart in lieu of a concluding team meeting. This
interaction pattern works well when team members
have worked with each other in the past, share a
common philosophy of treatment, and do not need
to discuss “routine” clinical scenarios. More com-
plex management questions are resolved either in
brief conversations held between two or more spe-
cialists, or in more formal patient staffings if the
need arises.

Team Recommendation
for Videofluoroscopy

We suggest that two or more team members agree
that a videofluoroscopic x-ray is indeed necessary
for a particular patient’s diagnosis and manage-
ment. The authorizing team members should mini-
mally include a speech-language pathologist and
the plastic surgeon. Representatives of these speci-
alities, and the team leader, comprise what we con-
sider to be the minimal “videofluoroscopic sub-
team.” A cleft-palate team that utilizes prosthetic
management of VPI might include a maxillofacial
prosthodontist on this subteam.

It is important to include the speech-language
pathologist in this decision-making process. Other-
wise, patients may be x-rayed for whom there is no
speech evidence of velopharyngeal insufficiency.
We recall one patient from a distant clinic who was
referred for an x-ray because of “speech indicative
of VPI.” However, this patient had severe hypona-
sality with no speech evidence of VPI, and did not
require x-ray examination. Because of the potential
differences in examiners’ perception of speech, we
recommend that when a patient with the diagnosis
of velopharyngeal insufficiency is referred to the
cleft-palate team with a request for a videofluoro-
scopic study, the diagnosis should first be con-
firmed by the team speech-language pathologist
before ordering the examination. It is also impor-
tant that the plastic surgeon sanction the x-ray requi-
sition because this will guard against x-raying pa-
tients who are not candidates for surgical or other
management.

The radiologist generally serves as a final source
of approval or disapproval of the requisitioned x-
ray study. As described in Chapter 17, it is impor-
tant that the radiologist assess the clinical and ethi-
cal implications of the x-ray for each patient.

X-Ray Interpretation

We feel it is important that the videofluoroscopic
evaluation be viewed and interpreted by a radiolo-
gist experienced with the technique. One reason is
the possibility that a pathological condition unre-
lated to velopharyngeal insufficiency may be pres-
ent on the study. We recall one patient, for example,
who was found on videofluoroscopy to have an
aberrant carotid artery lying close to the pharyngeal