of pathologists, and performs statistical analysis to provide in-
digital/virtual microscopy, performs expert assessment by a team
stained slides are returned to the CIQC, which scans all results for
Unstained slides from TMA blocks are sent to participants. The
CIQC for PT. Ten runs have been completed since inception.
class II IHC tests. Tissue microarray (TMA) design is used by the
an academic program affiliated with the Canadian Association of
(29%) and level III (4%). Collections were most commonly from
contributors who sent
2009 was 11.6 (range 1-156, median 3, mode 1). In 2009, 51% of
Pennsylvania. The mean number of biopsies each submitted for
lignancies (10 year average 34). Over 10 years, the practice saw
an average of 1,725 surgical biopsies/year, with a general upward
trend. The most common diagnoses in 2009 were: irritation
fibroma (7.4%), hyperkeratosis (6.4%), giant cell fibroma (5.7%),
epithelial dysplasia (5.5%), radicular granuloma (4.7%), mucoc-
cele (4.7%), radicular cyst (3.6%), and papilloma (3.1%). Of periapical
lesions in 2009, 55% were granulomas. 72% of PA lesions were from the maxilla; the maxillary incisors ac-
counted for 31% of all submitted PA lesions. Over the past 5
years, the practice had an average of 165 contributors, 94% from
Pennsylvania. The mean number of biopsies each submitted for
2009 was 11.6 (range 1-156, median 3, mode 1). In 2009, 51% of
contributors who sent >2 cases were oral surgeons, who contrib-
uted 84% of the cases. There was an average annual gain of 50
contributors, and a loss of 45. For one oral pathologist in 2009,
billings were mostly for level IV (59%), followed by level V
(29%) and level III (4%). Collections were most commonly from
Blue Cross/Blue Shield (59%), followed by cash (16%). Medi-
care accounted for 5% of collections.

10-YEAR REVIEW OF A SMALL SURGICAL ORAL PA-
This research collected data for several parameters for up to
10 years for the private surgical oral pathology practice associ-
ated with the School of Dental Medicine, University of Pitts-
burgh. In 2009, the practice rendered a diagnosis on 2,179 sur-
gical biopsies, 15 cytologies for candidiasis, 21 external consultations, and 44 internal ear-nose-throat pathology consul-
tations, for a total of 2,253 procedures. Of the biopsies, 64 were
dermatopathology cases (10 year average 42) and 48 were ma-
lignancies (10 year average 34). Over 10 years, the practice saw
an average of 1,725 surgical biopsies/year, with a general upward
trend. The most common diagnoses in 2009 were: irritation
fibroma (7.4%), hyperkeratosis (6.4%), giant cell fibroma (5.7%),
epithelial dysplasia (5.5%), radicular granuloma (4.7%), mucoc-
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(29%) and level III (4%). Collections were most commonly from
Blue Cross/Blue Shield (59%), followed by cash (16%). Medi-
care accounted for 5% of collections.

CANADIAN IMMUNOHISTOCHEMISTRY QUALITY
CONTROL (CIQC): AN ACADEMIC PROGRAM PRO-
VIDING PROFIENCY TESTING TO CANADIAN CLIN-
ICAL IMMUNOHISTOCHEMISTRY LABORATORIES. M.
Saskatchewan, Lions Gate Hospital, BC, U British Columbi,
General Jewish Hospital and McGill U, Que, U Toronto, Ont.
External quality assurance (EQA) is an important component of
quality control/quality assurance measures for clinical labora-
tories, and it includes immunohistochemistry (IHC) testing. Al-
though it is essential for proper IHC test calibration, only a few
programs offer proficiency testing (PT) to clinical laboratories. Recently, the Canadian Immunohistochemistry Quality Control
(CIQC) was created to support EQA for clinical IHC testing. It is
an academic program affiliated with the Canadian Association of
Pathology and provides several challenges in both class I and
class II IHC tests. Tissue microarray (TMA) design is used by the
CIQC for PT. Ten runs have been completed since inception.
Unstained slides from TMA blocks are sent to participants. The
stained slides are returned to the CIQC, which scans all results for
digital/virtual microscopy, performs expert assessment by a team
of pathologists, and performs statistical analysis to provide in-
formation on kappa values and concordance with reference re-
sults. Although class II test results appear to be satisfactory, class
I test results show very heterogeneous levels of success with
different IHC tests/antibodies, ranging from <40% to near 90%
with most tests being suboptimal. More extensive PT testing
needs to be developed for class I tests, which account for a great
majority of clinically used IHC tests.

INAPPROPRIATE CALIBRATION AND OPTIMIZATION
OF PANKERATIN AND LOW-MOLECULAR-WEIGHT
KERATIN IMMUNOHISTOCHEMISTRY TEST IS VERY
COMMON IN DIAGNOSTIC IHC LABORATORIES. M.
Saskatchewan, Lions Gate Hospital, BC, U British Columbi,
General Jewish Hospital and McGill U, Que, U Toronto, Ont.
IHC tests are generally classified as class I and class II tests.
Class I test results are used by pathologists in conjunction with
clinical and morphologic findings to determine cell differentia-
tion. Class II tests are prognostic and predictive markers, which
are used by clinicians to stratify patients for appropriate ther-
apies. Pankeratin (pan-CK) and low-molecular-weight keratin
(LMWCK) tests are the most commonly used class I tests to
support evidence for epithelial differentiation. Canadian Immu-
nohistochemistry Quality Control (CIQC) is a new provider of
proficiency testing (PT) for Canadian clinical IHC laboratories.
So far, CIQC has had 2 challenges in including PT for pan-CK
and LMWCK. CIQC has designed a 70-sample tissue microarray
(TMA) for run 1 and a 30-sample TMA for run 8. Run 1 had 13
participants and run 8 had 61 participants. In both runs, >40% of
laboratories produced poor results, indicating that about half of
clinical laboratories have inappropriately calibrated IHC tests for
most common markers of epithelial differentiation. Further anal-
yses indicated that inappropriate selection of external positive
controls and samples for optimization of these tests were the
problem. Therefore, proper selection of positive control material
and material for optimization of the tests is critical for proper
clinical application of class I IHC tests.

NEONATAL TEETH IN 6-WEEK-OLD BABY WITH BI-
LATERAL CLEFT LIP AND PALATE. CASE REPORT AND
REVIEW OF THE LITERATURE. C. Haberland, J. Persing.
Yale–New Haven Hospital, Conn.
The presence of teeth at birth or shortly thereafter is rare. We
present a 6-week-old Hispanic baby girl with a nonsyndromic
bilateral cleft lip and palate with a neonatal tooth on the right
maxilla adjacent to the cleft. Clinically, the tooth had yellow
dysplastic enamel, gingival inflammation, and mobility. An oc-
cclusal radiograph showed a calcified tooth-like structure lacking
a root, and a second outline of a tooth structure apical to it.
Owing to feeding difficulties, the tooth was extracted. One week
later, the patient presented with an erupted second tooth-like
structure at the previous extraction site. This tooth was also
extracted. Review of the literature showed that natal teeth occur
more frequently (3-1) than neonatal teeth. Overall, the incidence
of natal/neonatal teeth is between 1:8,000 to 1:10,000 in patients
without orofacial clefts. However, natal/neonatal teeth have been
reported to occur in 2% of patients with unilateral cleft lip and
palate and in 10% of patients with bilateral cleft lip and palate.
Clinically, the teeth usually appear with an opaque yellow-brown
irregular enamel and are mobile. Histologically, they present with
dysplastic and/or hypomineralized enamel, irregular dentinal tu-

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